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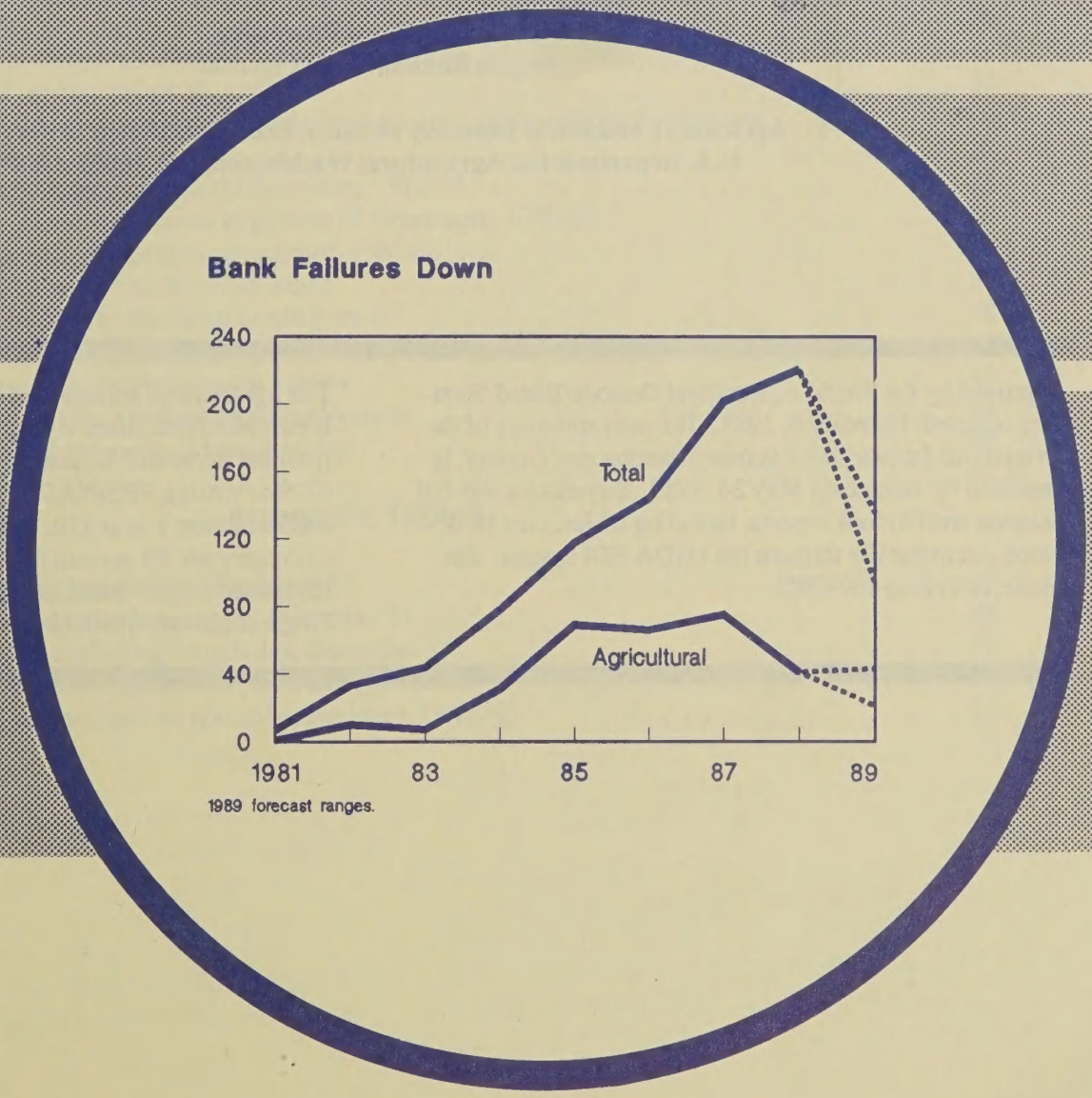
Situation and Outlook Report



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SUMMARY

The United States' economy was robust in 1988, with nearly 4 percent real growth and the lowest unemployment rate in 14 years. Consumer prices rose moderately, and interest rates gained slowly and steadily. The outlook for 1989 is bright, with continued strength in exports stimulating additions to capacity, and with moderate increases in consumer income and prices. This economic environment should moderately expand demand for agricultural products without substantial inflationary pressures on production costs.

The farm finance outlook for 1989 is favorable, largely because of the continued strength of crop and livestock commodity sales. Better economic fundamentals underlie long-run trends in agriculture. Farmland markets have improved and the farm sector balance sheet has stabilized. Excess stockpiles for most commodities are being reduced by the 1988 drought and strong demand. The cost/price pressures of the early and mid-1980's have been alleviated. The farm sector will continue to depend heavily on Government payments and some farms will be financially threatened because of the drought.

Farm lenders are optimistic about financial conditions despite the drought and do not think it will sidetrack the farm recovery. The major farm lender groups reported stronger loan portfolios in 1988. Lenders report fewer farm loan delinquencies, loan charge-offs, and foreclosures. Although the Farmers Home Administration (FmHA) has been an exception to this trend, indications are that it too is coming to grips with its sizable loan difficulties.

The large paydown in farm debt held by major farm lenders appears to be over and debt is expected to grow 1.5 to 3.5 percent in 1989. Farm loan demand has strengthened in the past year and should continue to expand in 1989. Creditworthy farmers should have ample access to operating credit. Competition for quality farm loans will remain keen. Demand for FmHA's direct operating loans could exceed funding due to last year's drought and the coming acreage expansion. This could spur greater interest in FmHA loan guarantees.

Highlights of the agricultural credit outlook are:

- Commercial banks that specialize in farm finance are continuing to bounce back from the mid-1980's crisis. By mid-1988, agricultural banks' return on equity was up more than 40 percent from 1987 and more than 150 percent from 1986. Estimated farm nonreal estate loan delinquencies held by commercial banks were down about $1.9 billion from the mid-1986 peak.

- The improving farm economy will save more agricultural banks from failure in 1989. Failures, after setting a post-Depression record of 75 in 1987, fell in 1988, and may be the same to sharply fewer in 1989. Total bank failures broke 200 in each of the past 2 years, but may be closer to 100 this year.

- Agricultural lenders are coping well with drought-related loan losses and are providing the credit needed for a strong 1989. From the beginning of 1988 through the peak of the drought, agricultural banks in drought-stressed areas remained in a stronger financial position and were making relatively more loans than banks elsewhere.

- Farm Credit System (FCS) gross loan volume broke a 4-year decline, stabilizing in 1988. Net income increased substantially during the first 9 months of 1988 due to an 88-percent rise in net interest income and a $515- million reversal of funds set aside to cover loan losses.

- A total of $690 million in debt was issued by the new FCS Assistance Corporation in 1988 to raise funds for the System. Four district banks and six Production Credit Associations were authorized for assistance, including the Jackson Federal Land Bank (FLB) which was declared insolvent in May 1988. The Corporation has authority to issue up to $4 billion in debt.

- The Agricultural Credit Act of 1987 required many FCS institutions to consider mergers. All Banks for Cooperatives (BC's), except those of the St. Paul and Springfield districts, merged in January 1989. The three remaining BC's can to make loans anywhere in the country. The FLB and Federal Intermediate Credit Bank of each System district, except Jackson, merged in July 1988. The Jackson banks were prohibited from merger due to the FLB liquidation.

- Use of FmHA's direct (insured) and guaranteed farmer programs declined 25 percent in fiscal 1988 to $2.3 billion, and represented only 52 percent of authorized appropriations. Direct farmer program obligations dropped 30 percent to $1.1 billion, the lowest since fiscal 1974, while guaranteed loans declined by 20 percent, the first drop since the programs became important 4 years ago.

- FmHA sent out delinquency notices in 1988 to some 71,000 borrowers with loan payments at least 180 days in arrears. Borrowers were notified of their delinquent status, their rights, and debt restructuring options. The goal is to resolve delinquent loans at the lowest cost to the Government, and allow farmers to continue farming.

- The farm mortgage portfolios of life insurance companies improved, but the industry views agricultural lending with considerable caution.

- The Federal Agricultural Mortgage Corporation (Farmer Mac) initial stock offering was heavily over-subscribed. Operation may start in late 1989.

GENERAL ECONOMIC CONDITIONS

Introduction

Despite the gloomy forecasts issued in late 1987, the economy was robust in 1988, with modest increases in the inflation rate and higher interest rates. Real GNP grew at a 3.8-percent annual rate and civilian unemployment fell from 5.8 to 5.3 percent. Consumer price inflation, which averaged 3.6 percent in 1987, was about 4 percent in 1988, and the 3-month Treasury bill rate, which averaged 5.9 percent in January 1988, was 8.1 percent in December. The foreign trade deficit improved in 1988, while the Federal budget deficit worsened slightly. Last year's economic performance set the stage for continued expansion in 1989, and possibly 1990.

Growth in 1988

Robust growth in late 1987 and 1988 was largely sparked by substantial decline in the exchange value of the dollar in 1985 and 1986. From February 1985 through the end of 1986, the dollar fell about 35 percent against an overall trade-weighted basket of foreign currencies, and continued to decline about another 10 percent in 1987 (figure 1). Flows of goods and services took some time to respond to exchange rate changes, in this case, about 18 months. The worst real net export deficit (inflation-adjusted exports of goods and services minus inflation-adjusted imports of goods and services) occurred in the third quarter of 1986, when imports exceeded exports by $152 billion at an annual rate (figure 2).

After the third quarter of 1986, the net export deficit began to improve. Exports began rising and imports grew more slowly. The composition of imports shifted significantly from consumer goods to producer goods. In real terms, imports of consumer goods (excluding autos) gained only 3 percent in 1987 and did not appreciably expand in 1988. This compares with 13-percent growth in 1986. Imports of foreign equipment surged nearly 16 percent in 1987, however, and roughly another 20 percent in 1988. Crude oil imports rose throughout 1987 and 1988. The falling dollar had clearly made imported consumer goods more expensive, and consumers curtailed their import purchases. But while the falling dollar was making foreign equipment more costly, rising domestic demand apparently made purchasing the equipment necessary.

Exports surged in the second half of 1987 and 1988. By the third quarter of 1988, inflation-adjusted exports of goods and services were 16 percent ahead of their third-quarter 1987 level and an exceptional 35-percent ahead of their third-quarter 1986 level. Agricultural exports rose about 14 percent in real terms in 1987, and followed with about an 11-percent increase in 1988. But exports of capital goods showed the most dramatic increase in 1988, rising slightly more than 30 percent after a 10-percent increase in 1987.

The jump in capital goods exports spurred the manufacturing sector, which had experienced little growth, or even declines, in output and employment in 1985 and 1986. For example, in 1985 and 1986 industrial production averaged 1.5-percent growth. In 1987 and 1988, industrial production surged 4.4 percent annually. Capacity utilization, which had stagnated in 1985, and fallen to 79 percent in September 1986, rose throughout 1987 and by December 1988 had reached 84.2 percent, a high for the expansion.

Plant and equipment spending surged in 1988, as producers attempted to increase their capacity to meet higher levels of foreign and domestic demand (figure 3). Spending on equipment jumped about 13 percent in 1988, but new nonresidential building activity was nearly flat.

Figure 1
Nominal Trade-Weighted Exchange Rates

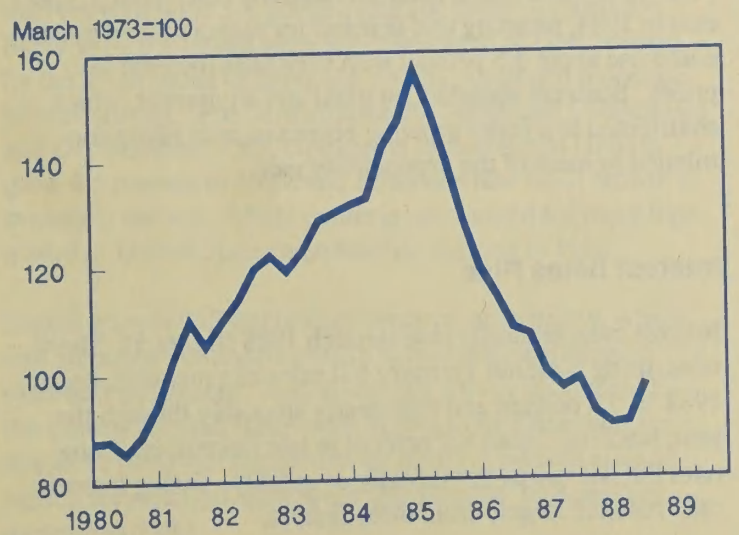


Figure 2
Exports and Imports of Goods and Services

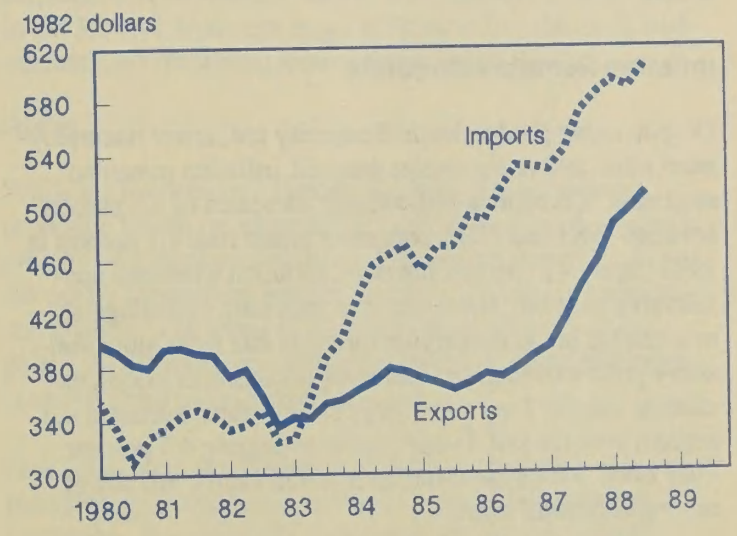


Figure 3
Plant and Equipment Purchases

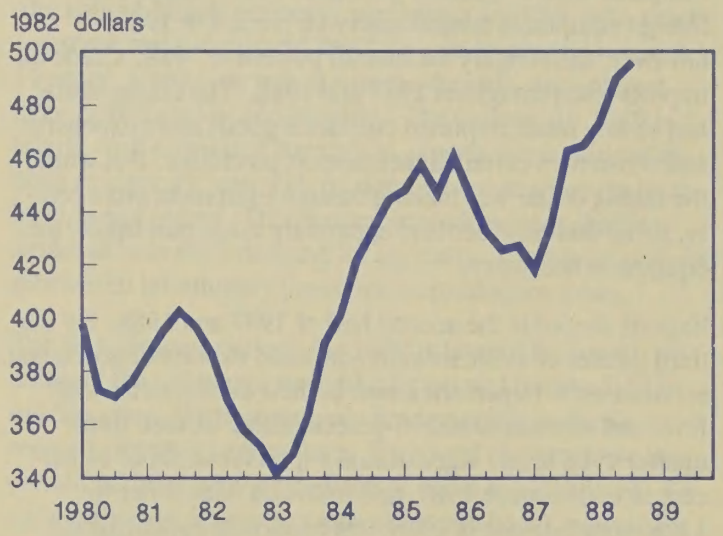
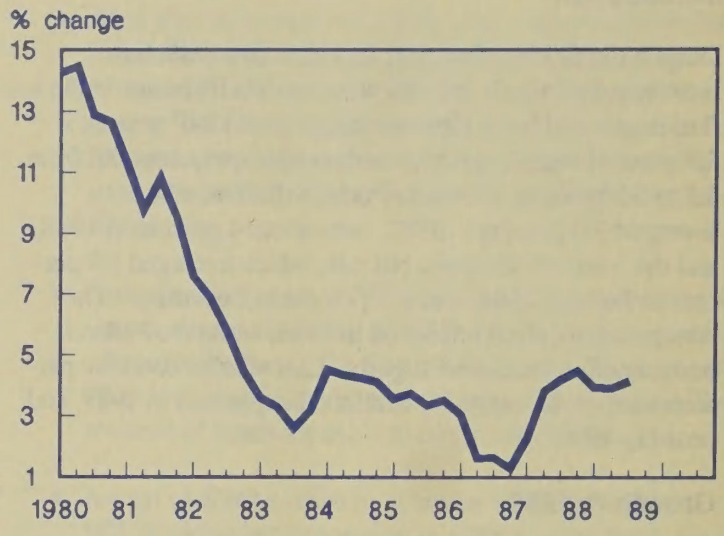


Figure 4
Consumer Price Inflation



Employment increases corresponded to industrial production increases. Manufacturing employment, which had fallen slightly in 1985 and 1986, rebounded in 1987 and even more in 1988. Nearly three-quarters of a million jobs were added in goods-producing industries, the most since the boom year of 1984, while jobs in service-producing industries rose about 2.7 million. The 5.4-percent unemployment rate for all of 1988 was the lowest in 14 years.

Increasing employment led to more disposable income, which grew about 3.8 percent last year after adjusting for inflation. The larger increases in manufacturing employment helped because these jobs tend to pay more on average than do service-sector jobs. Average weekly earnings in manufacturing were $424 in November 1988, compared with about $186 in retail trade. Of course, not all service-sector jobs are in retail trade (about 24 percent of service- sector jobs and about 18 percent of all jobs are in retail trade), but in general, manufacturing jobs tend to pay more, which tends to make disposable income grow faster when these jobs increase.

Inflation Remains Moderate

Despite rising production and capacity use, lower unemployment rates, and rising export demand, inflation remained moderate. Compared with average increases of 3.3 percent between 1983 and 1987, consumer prices rose 4.1 percent in 1988 (figure 4). By this measure, inflation worsened considerably in 1988. However, it is important to distinguish movements in the underlying inflation rate from more transitory price movements. Increases in consumer prices, excluding volatile food and energy components, averaged 4.3 percent over the last 5 years, while averaging 4.7 percent over 1988. Moderate inflation resulted from a mixture of several offsetting forces.

First, drought and drought-related price increases added to upward pressure on food prices. Consumer food prices, for example, rose 9.2 percent, annual rate, in the third quarter of 1988. This added roughly 1 to 1.5 percentage points to overall consumer price increases in that quarter.

Second, the exchange value of the dollar did not decline as quickly as in 1987, and actually rose in the middle of the year. On a trade-weighted basis, the value of the dollar rose 11.4 percent from the end of April through mid-August, and import prices (excluding fuels) fell in the third quarter. This held overall consumer prices down by reducing pressure on import prices.

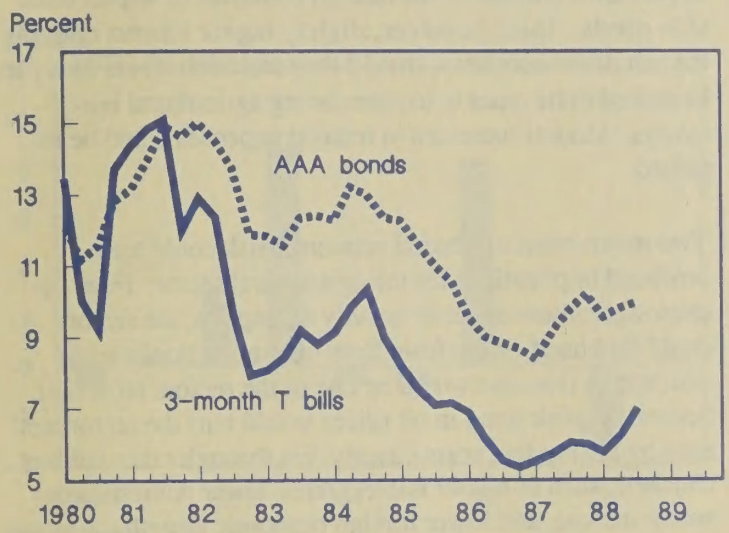
Third, crude oil prices were weak for most of the year, rallying only in the last 6 weeks or so. The price of West Texas Intermediate crude oil began the year near $18 per barrel, and had fallen below $15 by mid-September. By the end of the year, however, it had risen to about $16.50 per barrel.

Finally, manufacturing labor productivity rose about 3.5 percent in 1988, meaning that demand for manufactured goods could rise about 3.5 percent with very little increase in prices. Business spending on plant and equipment, which contributed to a faster growing economy, also likely contributed to some of the productivity gain.

Interest Rates Rise

Interest rates generally rose through 1988 (figure 5). Short rates, using 3-month Treasury bill rates as a measure, began 1988 at 5.9 percent and rose nearly smoothly through the year, reaching about 8.2 percent in late December. Long rates did not rise as consistently or quickly. Rising interest rates resulted largely from three factors.

Figure 5
Short and Long Term Interest Rates



First, the economy was growing fairly quickly in the first 6 months of the year, which tended to drive up the demand for funds and put upward pressure on interest rates. Second, inflation fears began to surface in late spring and were exacerbated by news of the drought. Higher expected inflation seems to have a nearly immediate effect on short-term interest rates. Finally, statements by the Federal Reserve that it would "err on the side of restrictiveness" in dealing with inflation, and the discount rate increase in August from 6 to 6.5 percent helped drive up short-term interest rates. Money supply growth for M2 averaged about 4 percent in the last 6 months of 1988, at the bottom end of the announced 4-to-8-percent target range. Since longer rates did not move as much, the expected effects were apparently seen as short term by many market participants.

The Outlook for 1989

Disregarding unforeseen economic events, the outlook for 1989 and beyond is fairly bright, although slightly worse than 1988. The current forecast is for about 3 percent real GNP growth for 1989, nearly a full percentage point lower than the estimated 3.8-percent rate for 1988. Exports are likely to be the fastest growing component of GNP, helped by the lower value of the dollar and by continued moderate growth abroad. The Organization for Economic Cooperation and Development (OECD) expects Japanese real GNP to grow 4.5 percent in 1989, and European real GNP growth to average 3 percent. These countries accounted for more than a third of United States merchandise exports in 1988.

Export growth will likely keep pressure on capacity, which will stimulate continued growth in business spending on plant and equipment. According to a survey conducted by the Census Bureau, businesses expect to increase their purchases of plant and equipment by nearly 6 percent after adjusting for inflation, somewhat less than the 10.8-percent increase in 1988.

Consumer spending is likely to grow about the same rate as real GNP, as consumers are still saving at historically low rates and carrying high levels of debt to income. The personal savings rate in 1988 rebounded to 4.2 percent from 3.2 percent in 1987, but was still about 2 percentage points behind the average of the late 1970's. Disposable income should continue to grow at around 3 percent.

Government purchases of goods and services are likely to grow very little in real terms, if at all. The new administration's "flexible freeze" program, and consensus that the Federal deficit problem remains severe, point to fiscal tightness for the next few years.

Inflation should be moderate in 1989, with consumer prices rising anywhere from 3.5 to 4.5 percent. Many analysts expect the value of the dollar to slide 5 to 10 percent, putting some upward pressure on consumer prices. Oil prices appear likely to remain weak, which should help hold overall inflation down. And with a return to more normal weather conditions, food price increases should not contribute to increasing inflation. Finally, the slight slowing in the economy should help to keep the underlying inflation rate moderate, and provide enough time for the newly acquired capital equipment to boost capacity and raise productivity.

The interest rate outlook is somewhat less clear. In general, most analysts expect interest rates to move along with real GNP growth. Real GNP growth higher than 2.5 to 3 percent is likely to be accompanied by higher interest rates, especially short-term rates. Real GNP growth slower than 2.5 percent may be accompanied by slightly falling rates. There are two reasons for this. First, real growth tends to put upward pressure on rates as the demand for funds grows. Secondly, however, the Federal Reserve has indicated that it is concerned about inflation when the economy is growing faster than about 2.5 percent. Real growth substantially in excess of 2.5 percent could trigger monetary tightening, and lead to higher interest rates.

Inflation will also help determine interest rates and inflation surprises will be reflected nearly immediately. But inflation in the 3.5-to-4.5-percent range is likely to be consistent with interest rates remaining around their current levels.

Risks

While the fundamental factors which determine general economic health are all pointing in the direction of continued growth with moderate inflation. Expansions generally do not die out by themselves, but are usually cut short by some sudden change. The changes can come in the form of a new policy, an oil embargo, or some severe financial disturbance. Here are some risks to monitor.

First, protectionism. Attempts to protect a domestic industry from foreign competition are likely to be met by foreign retaliation. Recent heightened tension in the agricultural

trade talks associated with the GATT has probably increased the chances of a round of protectionist legislation and counter-legislation. The key to the United States' economic growth over the next 3 to 5 years is exports. Protectionism would strike right at the heart of this critical factor and could bring the expansion to a rapid close.

Second, policy decisions could have a major impact on the expansion. Monetary and fiscal policymakers will have to walk a fine line between being too tight and too loose. Running a loose monetary policy risks inflation, a rapid run-up in nominal interest rates, and probably a steep decline in the value of the dollar. Higher nominal interest rates by themselves could cause a recession, as would a quick reversal of the monetary loosening to deal with higher inflation rates. But a policy decision on the side of looseness seems unlikely given the announced positions of the Federal Reserve.

More likely is the possibility of a too-tight monetary policy. In this case, interest rates would rise, choking off capital spending and forcing a slide into recession. A recession might improve the trade balance, since it would slow demand for imported goods, but it would certainly worsen the Federal deficit. To compound the problem, a worsening Federal deficit might be met with even more stringent fiscal policy, possibly driving the economy even deeper into recession in the short run. The Federal Reserve has successfully walked this tightrope for the last 2 years.

On the fiscal policy side, the chief risk seems to be raising taxes or curbing spending too much. Either taken to the extreme would drive the economy into recession, at least in the short run, which would tend to offset some of the projected Federal deficit improvement from such an action.

Finally, oil prices remain on the list of factors to watch carefully, if only because they have demonstrated a capacity for extreme volatility and they remain an important input for many sectors. Other, less probable risks include a collapse of a sizable number of savings and loans and the attendant strain on the financial system, and a default by a major debtor country and its attendant strain on the financial system. These have been on the list for some time. It is likely that a recession-triggering event, if it comes, will not be on the list, simply because some actions have already been taken to deal with these problems.

Implications for Agriculture

Recent and likely future macroeconomic developments should provide moderate support for the agricultural sector. First, expected moderate growth in consumers' disposable incomes will provide a stable and slowly increasing base of demand for agricultural products. Second, likely robust economic growth abroad, especially in developed countries, will provide for a modestly expanding market for all agricultural products, while the previous and likely small future declines in the exchange value of the dollar should continue to provide an incentive for foreign countries to import more U.S. goods. Third, however, slightly higher interest rates in the rest of the economy, should they materialize, are likely to be passed quite quickly to rates facing agricultural borrowers. Modest increases in interest expenses could be expected.

Two major areas of general economic risk could have profound implications for the agricultural sector. First, because agriculture depends heavily on exports, the sector could find itself on the front lines of a protectionist trade war, and in that case would be one of the sectors most hurt. Second, a quick jump in oil prices would hurt the sector, not only by raising fuel costs directly, but through other indirect channels, such as higher interest rates, lower domestic consumer income, and lower foreign economic growth.

Conclusion

The general economy seems poised for a continuation of the current expansion, although at a rate slightly slower than in 1988. Inflation is likely to remain in the 3.5-to-4.5-percent range, while interest rates should remain around their current levels. Continued slow improvement in both the trade and Federal deficits is likely under this scenario. Unlike the late 1970's and early 1980's, when the macroeconomic environment seemed unstable and somewhat hostile to many sectors, the next few years are likely to be characterized by a stable and mildly supporting general economic environment.

FARM ECONOMY

Farm Income

Farm income prospects for 1989 are relatively optimistic (figures 6 and 7). Net cash income--cash receipts, farm related income, and direct Government payments minus cash expenses--may decline as farmers rebuild inventories, but could still be the fourth highest on record. This cash-based concept which measures the total income farmers receive in a given year, regardless of the year in which the marketed output was produced, is expected to be in the $48-to-$52-billion range in 1989, compared with $57 billion in 1987 and 1988.

Net farm income--the difference between gross farm income and total expenses--is expected to bounce back as yields reach more usual levels and the acreage of program crops grows. This accrual-based concept measures the profit or loss associated with a given year's production, changes in inventories treated as income. Since net farm income is a measure of the value of current production, it will usually decline in a drought year. Net farm income is forecast to be in the $44-to-$48-billion range in 1989, compared with $46.3 and $39 billion in 1987 and 1988, respectively.

Figure 6
Net CCC Loans

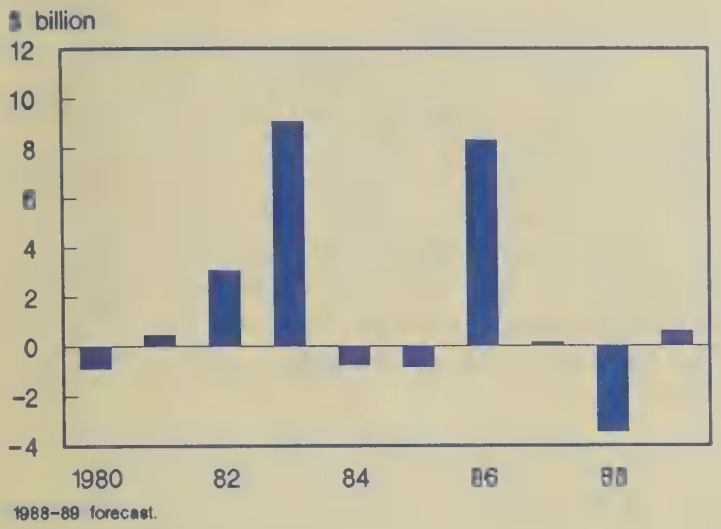


Figure 7
Gross Cash Income

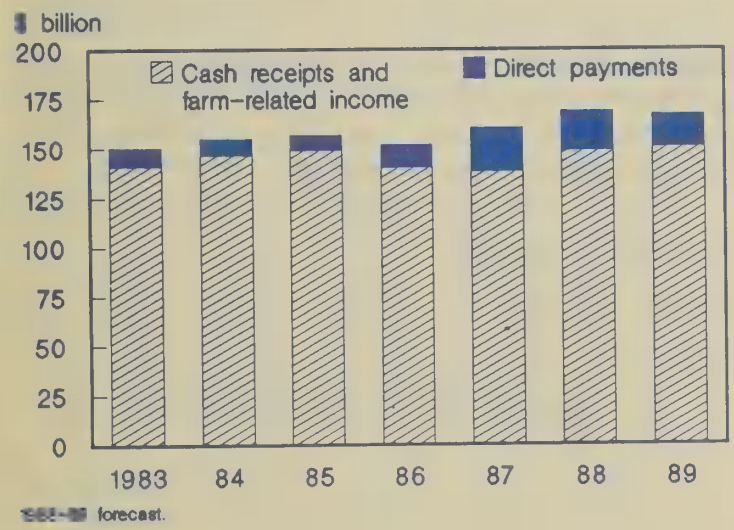


Figure 8
Direct Government Payments: Cash and PIK

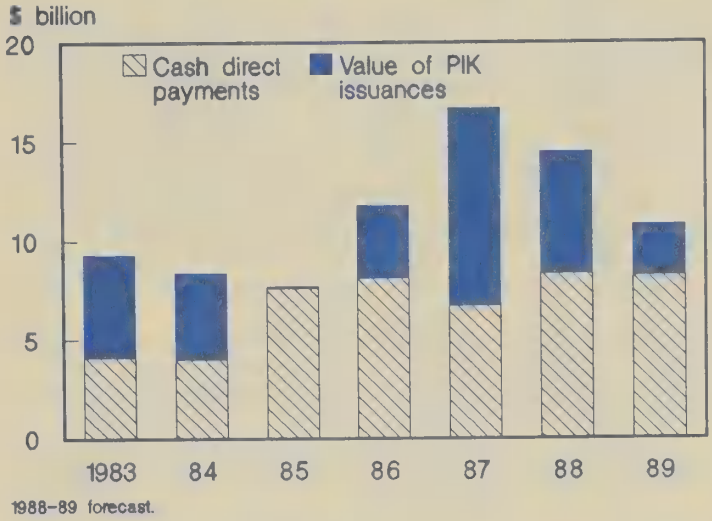
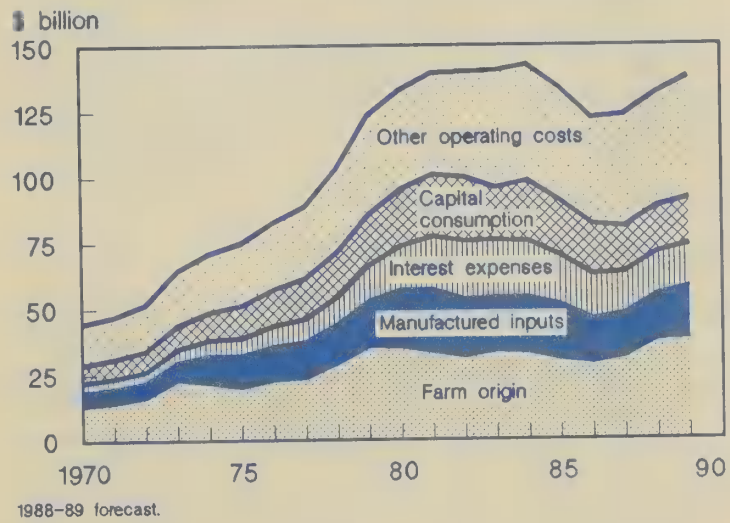


Figure 9
Farm Production Expenses



Receipts Up from 1988's Record

Crop receipts for 1989 may be up as much as 2 percent over 1988. Coming on top of a 12-percent increase in 1988, receipts may reach between $148 and $152 billion.

More normal yields and lower acreage reduction program requirements are expected to increase crop production and reduce prices. However, low stock levels entering the new crop production season will prevent 1989 prices from falling very far. The prices-received index for food grains is expected to be down only marginally or unchanged. A larger decline in the prices received index for oil crops is expected (in the neighborhood of 6 percent), while prices received for feed grains may rise as much as 3 percent. Livestock receipts are expected to be between $79 and $82 billion, about the same as in 1988. Cattle receipts are likely to remain stable and hog receipts should rebound. Cattle prices may increase 7 percent, while production declines 7 percent.

Hog receipts are expected to rise as farm prices more than offset a very small decline in pork production.

Poultry and egg receipts are expected to rise slightly on strong increases for eggs and turkeys. A decline in the farm price of broilers will nearly cancel an increase in production.

Government Payments To Continue Declining

The outlook through 1989 is for lower Government commodity program payments because of higher commodity prices and reduced deficiency payments (figure 8). Total CCC outlays, including Government direct payments and CCC net loan activity, were about $12 billion in 1988 and will be about the same in 1989, compared with nearly $22 billion dollars in 1987.

Expenses Still Rising

Cash expenses could rise by 4 to 6 percent this year (figure 9). As in 1988, prices paid indexes are expected to rise for

all categories of farm expenditures (figure 10). However, most prices are expected to increase less than 7 percent, except 10 percent for seed.

More planted acres are expected to lead to large increases in total seed, fertilizer, pesticide, and fuel expenditures. Prices paid for these inputs could be up 2 to 6 percent, but expenditures for each should increase more than 10 percent (figure 11). Expenditures on seed, fertilizer, pesticides, and fuel will account for nearly 45 percent of the total increase in cash expenses.

Changes in expenditures on feed and feeder livestock are expected to be about offsetting. Feed expenditures will rise slightly from the already high levels of 1988, but by less than 4 percent. The 6-percent decline in feeder livestock expenditures is relatively larger because these outlays are usually only about two-thirds of feed expenditures.

First Interest Increase Since 1982

This is likely to be the first time since 1982 that both short-term and real estate interest expenditures increase. With more acres planted and across-the-board higher input prices, short-term debt is likely to increase between 3 and 5 percent. Higher real estate interest expenditures are expected as land values increase again in 1989, demand for land strengthens, and interest rates move up slightly.

Balance Sheet Continues Improving

The 1989 farm financial picture continues to improve, with asset and equity values expected to rise 2 to 3 percent from 1988 levels. Returns to operators--although down to $36 billion in 1988 from 1987's record level of $42.5 billion--should rebound to $42 to $46 billion in 1989. The 1988 drought is continuing to alleviate the problem of excess commodity stockpiles for most crops. Land markets and the farm sector balance sheet have stabilized in real terms (1982 dollars). While debt has fallen, assets and equity have generally kept pace with inflation since 1986.

Farm Asset Growth Continues

The value of U.S. farm assets (excluding operator households) was estimated at $741 billion on December 31, 1988, up 4.5 percent from 1987, and forecast at $755 to $765 billion for December 31, 1989, mostly due to rising farm real estate values. Farm real estate values increased by $30 billion in 1988, and accounted for most of the growth in farm asset values. The projected 2- to 4-percent growth in land values in 1989 varies considerably across the country. Stabilization of land values is essential for long-run farm financial progress.

Nonreal estate asset values in 1988 remained near 1987 levels, but are forecast to rise to $190 to $200 billion in 1989. The anticipated 2- to 4-percent increase in nonreal estate asset values in 1989 is due mostly to higher inventory values of farm machinery, equipment, and crops stored on farms (figure 12). Crop inventory values are forecast to rise to $18 to $22 billion in 1989, as farmers replenish depleted stocks. Livestock and poultry values may rise slightly, as will farm machinery and equipment values. Farm financial assets held by farmers likely rose by about $1 billion in 1988 and could gain another billion in 1989.

Farm Debt to Increase

Farm debt will likely increase slightly in 1989, reversing a 5-year trend of annual reduction. During the year, total debt outstanding is anticipated to increase by 1.5 to 3.5 percent. The 1988 drought dramatically affected individual farmers' debt balances. Producers in less severe drought areas benefited from higher prices and near-normal production levels. Apparently, these higher-than-anticipated cash incomes were applied to further debt retirement.

Figure 10
Prices Paid and Received by Farmers

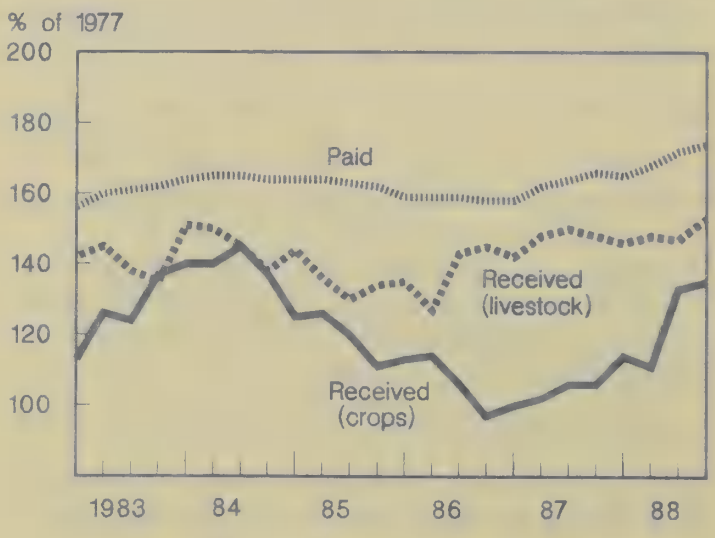


Figure 11
Prices Paid for Major Production Inputs

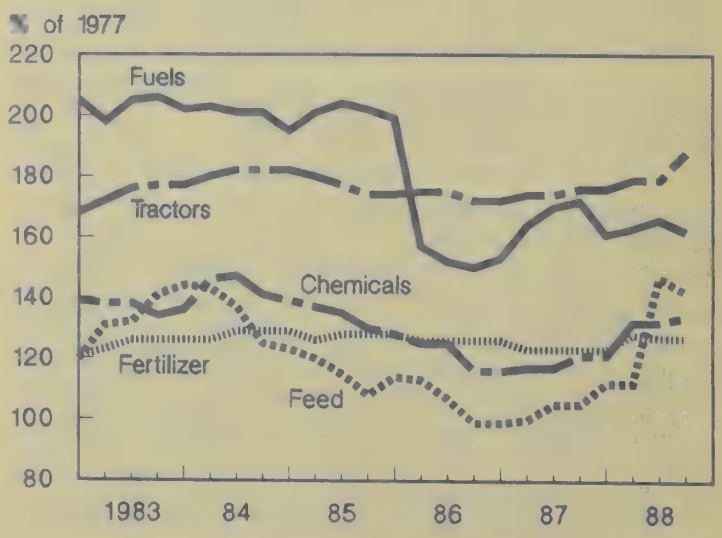
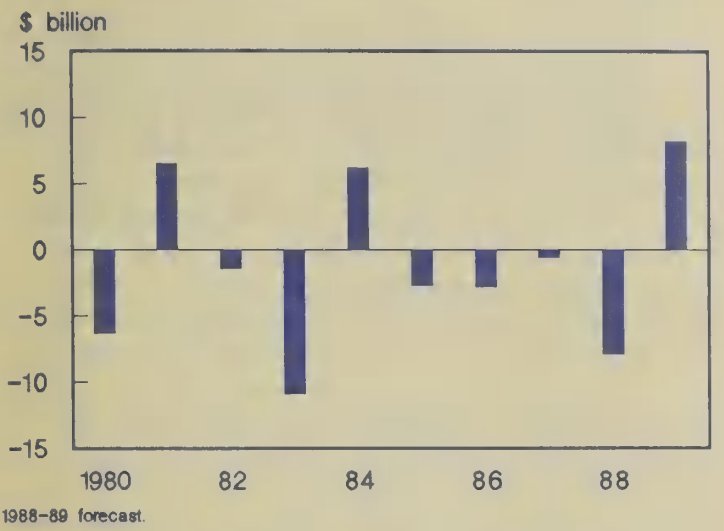


Figure 12
Value of Inventory Adjustments



1988-89 forecast.

Equity Growing

Farm equity is projected to be $612 to $622 billion at the end of 1989. Real farm equity (1982 dollars) rose 3 percent in 1988 but may fall slightly in 1989. Farm equity growth has been due to increased asset values and decreased amounts of debt used to finance operating expenses and purchases of land, machinery, and equipment. This firming of the sector's equity base is essential for long-term financial recovery.

AGRICULTURAL LENDERS

Overview

Farm lenders are optimistic about future farm financial conditions despite the effects of last summer's drought. Overall, lenders do not think the drought will sidetrack the farm recovery. However, it might slow the recovery's pace.

The major farm lender groups reported improving loan quality in 1988. Lenders continue to report falling farm loan delinquencies, loan charge-offs, and foreclosures. The Farmers Home Administration (FmHA) is an exception to this trend, but there are indications it too is coming to grips with its sizable loan problems.

There is a consensus that farmers in the Northern Plains, Mountain, and Central Lake States hit hardest by the drought will experience some renewed farm financial stress. Farmers not on a sound financial footing, such as recently restructured borrowers, could be pushed toward failure. Federal disaster assistance, coupled with higher commodity prices, will help mitigate the affect of income losses for many farmers.

Farm Debt Stabilizing

The large paydown in farm debt appears to be over. Outstanding loan volumes for commercial banks and the Farm Credit System (FCS) have increased in the past year, yet life insurance companies and the FmHA continue to show slight net declines. Most noteworthy is a $1.1-billion rise in outstanding farm real estate debt held by commercial banks in the year ending in June. Whether this increase is due to more stringent collateral requirements for operating loans or a shift in market share is uncertain. Traditionally, banks have played only a minor role in farm real estate lending.

Farm loan demand has strengthened in the past year and should continue to expand in 1989. Much of the increase in demand is expected to come from greater needs for operating credit as farmers gear up to plant additional acres. Projected higher production costs, any drought-induced income shortfalls, and lower advance deficiency payments could also contribute to greater financing of 1989 production costs. U.S. per acre farm real estate values rose 3 percent during the year ended in February 1988, are forecast to rise 6 percent for the year ending in February 1989, and are expected to rise 2-4 percent by next year. Increased activity in the land market should expand the demand for mortgage loans.

Credit Access is Ample

Creditworthy farmers should have ample access to operating credit in 1989. Commercial banks are the largest suppliers of operating credit. As evidenced by their low loan-to-deposit ratios, they have the liquidity to meet greater credit needs. The rejuvenated FCS is offering lower interest rates and will be increasingly competitive in short-, intermediate-, and long-term credit markets. After years of losses, the FCS is now posting a net profit. The life insurance companies on the whole continue to be more cautious lenders, however. Some of these companies are expressing interest only in larger credit lines or agribusiness loans. Life insurance companies specialize in real estate financing.

The outlook for 1989 indicates that competition for high-quality farm loans will remain keen. Competition for these loans should pressure lenders to keep interest rates down. Commercial lenders seem willing to finance another farm production expansion, knowing the history of strong Federal support for agriculture.

Federal credit assistance to family-sized farmers unable to obtain credit elsewhere is provided through the FmHA. FmHA's total lending authority remains virtually unchanged from 1988. With the exception of the direct farm ownership and operating loan programs, this authority should be sufficient nationally to meet the needs of most higher-risk farmers. Demand for FmHA's direct operating loans could

exceed funding due to last year's drought and the coming acreage expansion. There is $900 million available for the direct operating loan program. In fiscal 1988, this same funding was exhausted by year's end.

Weaker financial condition of some farmers and possible shortages of direct operating credit supplied by FmHA could spur greater interest in loan guarantees. Under these programs, FmHA guarantees repayment of up to 90 percent of a loan made by a qualified lender, if the farmer defaults. Because FmHA committed only 40 percent of its guaranteed lending budget last fiscal year, there should be sufficient funding to meet any increases in the demand.

Related Developments

The numbers of loans restructured by FmHA and FCS by mid-1988 were down roughly 50 percent from the previous year. FmHA will restructure more loans this year as it implements the rules of the Agricultural Credit Act of 1987. The new rules should assist many FmHA borrowers but will accelerate FmHA's loan write-offs, which have been mounting in recent years. Loan restructuring can include the reamortizing or deferring of loan principal and interest or outright debt forgiveness.

Many lenders in the past 2 years have expressed concern that borrower rights legislation, such as Chapter 12 farm bankruptcy, unfairly benefit farmers and would hamper the delivery of agricultural credit. Although this opinion remains unchanged, it seems that lenders are adjusting to the new playing field. The impact on credit delivery appears minor so far.

Use of Chapter 12 farm bankruptcy by farmers has not met early predictions. Chapter 12 filings totaled 1,181 for the first 6 months of 1988, down from 4,212 for the same period in 1987. There are numerous explanations for the decline, but voluntary loan restructuring by lenders in lieu of foreclosure is a big factor. A drought-induced rise in filings may happen this winter.

Inventories of lender-acquired farm property continue to decline. Aggressive restructuring of delinquent loans, an improving farm economy, and improved sales are factors paring the farm property inventory. Despite the drought, lenders continue to report strong farmland prices in many markets. Many sales of acquired farmland continue to be made for cash and often above initial asking prices. However, lenders raise concerns that poor quality land may not hold its value because of last year's drought.

The effects of the coming secondary market for agricultural mortgages, Farmer Mac, continue to be uncertain because key underwriting standards have yet to be announced. The permanent Farmer Mac board will have to approve loan underwriting standards, property appraisal guidelines, and other operating regulations. Farmer Mac did well in its first test of acceptance when the $10 million November 1988 offering of Class A stock reserved for commercial lenders was oversubscribed by 60 percent, indicating a strong interest in access to the new market. Operation of the new market should be in full swing by the end of 1989. Lenders' reactions toward the market vary, but with time it could standardize many farm mortgage lending practices and increase lender competition reducing farmers' credit costs.

Current Lender Loan Portfolios

The distribution of the farm sector's $139.4 billion debt outstanding, excluding operator households, as of December 31, 1988, is summarized in table 1. Commercial banks account for 30.5 percent of all farm loans, making them the leading lender, followed by the FCS with 26.1 percent. Individuals and others are estimated to hold 20.6 percent of the total.

Table 1--Distribution of farm debt, excluding operator households, by lender, December 31, 1988 1/

Lender	Type of debt: Real estate	Type of debt: Nonreal estate	Total
	Percent of total		
Commercial banks	10.2	20.4	30.5
Farm Credit System	19.8	6.3	26.1
Federal Land Banks	19.8	---	19.8
Production Credit Associations	---	6.3	6.3
Federal Intermediate Credit Banks 2/	---	3/	3/
Farmers Home Administration	6.5	9.8	16.4
Life insurance companies	6.4	---	6.4
Individuals and others 4/	12.2	8.4	20.6
Commodity Credit Corporation	5/	---	5/
Total	55.0	45.0	100.0

1/ Preliminary. Due to rounding some subcategories may not add to totals. 2/ Financial institutions other than PCA's that obtain funds from the FICB's. 3/ $75 million or 0.05 percent of total debt. 4/ Includes Small Business Administration farm loans. 5/ $15 million or 0.01 percent of total debt. This includes CCC storage and drying facilities loans, but excludes CCC crop loans.

Total farm debt outstanding at the end of 1988 represents a decline of a $53.3 billion, or 27.6 percent, from its peak in 1983. (See appendix table 1.) After peaking in 1983, real estate debt declined 26.8 percent, and nonreal estate debt decreased 28.6 percent. (See appendix tables 2 and 3.) Within the real estate debt portfolio, loans held by Federal Land Banks (FLB's) declined 39.1 percent from their peak in 1984. Life insurance company loans declined 27.0 percent from the high in 1981.

The value of outstanding real estate loans held by commercial banks increased 87.2 percent during the last 7 years; 52.2 percent since 1984. However, some of the increase resulted from higher loan collateral requirements in the wake of the farm financial crisis rather than from new land loans. The collateral requirement shifts loans from the nonreal estate to real estate category. The FmHA real estate loan total peaked in 1985, but has declined only 4.8 percent since. It increased 12.3 percent 1981-88. Despite these changes, FLB's remain the dominant real estate lender with 36.0 percent of the market in 1988, but down from a peak of 43.7 percent in 1984.

A number of important changes have occurred in the nonreal estate portfolios of the major farm lenders. By the end of 1988, Production Credit Association (PCA) loans had declined 56.9 percent from their 1981 peak and Federal Intermediate Credit Bank (FICB) loans had declined 91.8 percent from their 1981 peak. At the end of 1987, commercial bank loans had decreased 26.7 percent from their top figure in 1984, before increasing 3 percent in 1988. By 1988, FmHA loans had increased 8.0 percent from 1981, but had declined 6.7 percent from a 1985 peak.

The most interesting trends in the nonreal estate portfolio are for commercial banks and PCA's which experienced substantial paydowns, beginning in 1981 for PCA's and in 1984 for banks. (See appendix table 3.) Through the end of 1988, the PCA paydown totaled $11.6 billion and the 1984-87 paydown of commercial banks was $10 billion. (The latter had an $816-million or 3-percent increase in 1987-88 in real estate loans outstanding.) The PCA percentage decline was more dramatic because it came from a smaller initial base. In 1988, the PCA's held 14.0 percent and commercial banks held 45.3 percent of total nonreal estate debt. The comparable figures in 1981 were 24.4 and 37.3 percent. Thus, in the shrinking farm debt market of the 1980's commercial banks have been increasing their market share.

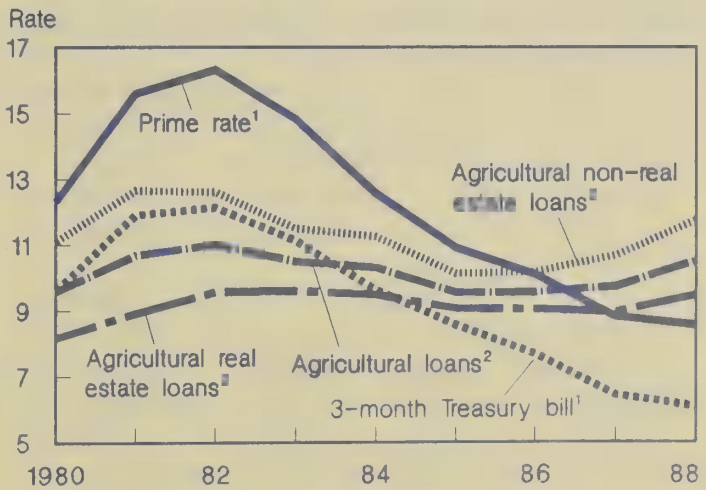
The overall paydown in the farm loan portfolio appears to have been driven more by demand than supply. Farmers have decided to hold less debt for a variety of reasons. Not only did total debt peak in 1983, but interest rates peaked even before then, making debt servicing a costly item. Moreover, as other interest rates declined in the 1980's, those for the farm sector tended to come down more slowly (figure 13). But by 1988, compared with early years of the 1980's, interest rates were lower, farm income strengthened, asset values stabilized, and debt was down. (See appendix tables 4 and 5.) So during 1989, total farm debt outstanding is anticipated to increase by about $2 to $5 billion. Nonreal estate debt should increase $2 to $3 billion during the year, with the balance of the growth going to the real estate portfolio.

Information on delinquent farm loans by lender during 1980-88 is shown in table 2. FmHA had the highest delinquency rates in both dollars and share of the portfolio. The total value of delinquent loans for the other lenders peaked at mid-year 1987. Trailing the FmHA were the FCS, commercial banks, and life insurance companies. Delinquencies as a percentage of outstanding farm loans peaked in 1986 for all lenders except FmHA and the life insurance companies, but remain high by post-Depression standards.

A key concern for farm lenders is the amount of loan losses they have to absorb. These losses for three major farm lenders--commercial banks, FCS, and FmHA--for 1982-88 are shown in table 3. During 1985-87, the three lenders had agricultural loan charge-offs totaling $7.8 billion. The absolute amount of losses experienced by commercial banks was higher than for the FCS as a whole during 1984-85. This changed in 1986, however, with FCS absolute loan loss levels rising above those experienced by commercial banks. But in 1987 the commercial banks once again had higher losses. FCS loan losses as percentages of loans outstanding have remained below those experienced by commercial banks throughout the 1984-87 span. (Commercial bank agricultural loan loss data are not available for 1982-83.)

The varying pattern of losses reflects institutional, accounting, and regulatory differences. Commercial banks tend to focus on farm production loans, where problems surfaced

Figure 13
Agricultural Interest Rates



1/ 3-year moving average. 2/ Average rate on outstanding debt.

Table 2--Lender delinquent farm loans, 1980-88

Lender	Yearend 1/							Mid-year 1987 2/	Year-end 1987 1/	Mid-year 1988 2/
	1980	1981	1982	1983	1984	1985	1986			
	Billion dollars									
Commercial banks 3/ 4/	NA	NA	.9	1.5	2.1	2.6	2.2	2.0	1.5	1.3
Farm Credit System 5/	.3	.4	.7	1.3	2.1	5.3	7.1	6.5	5.2	4.5
Life insurance companies 3/ 6/	.3	.5	.8	1.0	1.2	1.7	1.8	1.8	1.3	1.2
Farmers Home Administration 7/	3.6	5.8	9.5	11.0	12.1	11.9	12.0	12.9	11.8	13.4
	Percentage of outstanding loans									
Commercial banks 3/ 4/	NA	NA	2.5	3.8	5.2	7.3	7.0	6.7	5.2	4.5
Farm Credit System 5/	.5	.5	1.1	1.8	3.3	8.7	14.4	11.9	9.9	8.6
Life insurance companies 3/ 6/	2.0	3.7	6.4	8.3	9.6	15.1	17.0	18.0	14.3	13.3
Farmers Home Administration 7/	18.2	24.1	37.9	43.9	45.9	41.5	42.9	49.0	45.8	52.6

NA= Not available.
1/ End of fiscal year (Sept. 30) for the Farmers Home Administration (FmHA) and end of the calendar year (Dec. 31) for the other lenders. 2/ June 30. 3/ Delinquencies were reported by institutions holding most of the farm loans in this lender group. Data shown are estimates obtained by assuming that the remaining institutions in the group experienced the same delinquency rate. 4/ Farm nonreal estate loans past due 90 days or more or in nonaccrual status, from the reports of condition submitted by insured commercial banks. 5/ Data shown are nonaccrual loans. The Farm Credit System also reports "other high-risk loans," but not all such loans are delinquent. Data are from Summary Report of Condition and Performance of the Farm Credit System, Farm Credit Corporation of America, for quarters ending June 30, 1986, June 30, 1987, and June 30, 1988; Farm Credit System Annual Information Statement--1986, Federal Farm Credit Banks Funding Corporation, March 6, 1987; and, for years before 1985, from Farm Credit Administration Financial Forecast of the Farm Credit System, Appendix B, Farm Credit Administration, May 1987. 6/ Loans with interest in arrears more than 90 days. Data are from the American Council of Life Insurance, Investment Bulletin, various issues. 7/ Delinquent loans are defined as $10 or more and past due 15 days or more. Data shown are for September 30; thus, they avoid the yearend seasonal peak in very short-term delinquencies and so are more comparable with those shown for other lenders. The FmHA data reflect the total outstanding amount of the loans that are delinquent (as do the data shown for other lenders), rather than the smaller amount of delinquent payments that is often reported as FmHA "delinquencies." Data are from Farmers Home Administration, 616 report, various issues.

Source: Data through 1986 adopted from Emanuel Melichar, "Turning the Corner on Troubled Farm Debt," Federal Reserve Bulletin, Vol. 73, No. 7, July 1987, p. 529. Data beginning with 1987 obtained by ERS from the same sources as those cited by Melichar.

Table 3--Lender farm loan losses (net charge-offs), 1982-88

Year	Commercial banks 1/	Farm Credit System 2/			FCS	Farmers Home Administration 3/	Exhibit: Life insurance company foreclosures 4/
		FLB/FLBA	FICB/PCA	Bank for Cooperatives			
	Million dollars (Percent of loans outstanding at end of period) 5/						
1982	NA	2 6/	1 6/	11 (0.1)	13 6/	32 (0.1)	170 (1.3)
1983	NA	9 6/	2 6/	(3) 6/	8 6/	77 (0.3)	247 (1.9)
1984	900 (2.3)	110 (0.2)	308 (1.6)	10 (0.1)	428 (0.5)	128 (0.5)	289 (2.5)
1985	1,300 (3.7)	576 (1.2)	514 (3.4)	15 (0.2)	1,105 (1.6)	257 (0.9)	530 (4.8)
1986	1,200 (3.8)	1,019 (2.6)	304 (2.6)	(2) 6/	1,321 (2.3)	434 (1.5)	827 (7.9)
1987	535 (1.8)	433 (1.3)	57 (0.6)	(2) 6/	488 (0.9)	1,199 (4.3)	692 (7.5)
1988, Quarter 1	28 (0.1)	46 (0.1)	(3) 6/	4 6/	47 (0.1)	NA	108 (1.2)
1988, Quarter 2	43 (0.1)7/	5 6/	(10)(0.1)	1 6/	(4) 6/	NA	77 (0.9)
1988, Quarter 3	NA	8/ 8/	8/ 8/	1 6/	39 (0.1) 8/	NA	66 (0.7)

NA= Not available. 1/ Calendar year data for nonreal estate loans. 2/ Calendar year data. 3/ Fiscal year data beginning October 1. Includes data on the insured (direct) and guaranteed farm loan programs. 4/ Loan charge-off data are not available for life insurance companies. 5/ Loan loss data rounded to nearest million dollars. 6/ Less than 0.05 percent. 7/ Does not include deferred loan losses. Small banks with more than 25 percent of their loans to agriculture in farm-dependent areas have been allowed (after regulatory approval) to amortize loan losses over a seven-year period. As of June 30, 1988, 35 banks reported $40 million in agricultural loan loss deferrals. 8/ FLB's and FICB's were merged to form Farm Credit Banks (FCB's) early in the third quarter of 1988.

Source: American Council of Life Insurance, Board of Governors of the Federal Reserve System, Farm Credit Corporation of America, and Farmers Home Administration.

more quickly than for farm mortgages in FCS's FLB loan portfolio. Moreover, until 1985 the FCS tended to show more loan forbearance than commercial banks. The regulators at the time more closely monitored the commercial banks, pressuring them to recognize loan losses in a more timely manner. In 1985, the FCS began to move toward more stringent accounting procedures and the Farm Credit Amendments Act of 1985 changed the Farm Credit Administration's (FCA) regulatory role to more closely match that of the Federal commercial bank regulators. Also, the FCS realized the challenges that it tended to downplay in 1982-83 had to be addressed. The result was a much more realistic approach to FCS problem loans.

Nevertheless, it often takes a number of months to close out a FLB farm mortgage loan. Thus, FLB problems recognized in 1984 and later required significant time to work their way through to final settlement. However, the FLB loan write-off figures did not remain high for 1987, as might have been expected. FLB's took a "wait and see" approach in 1987 because of the Federal legislation being debated and because the FCS banks simply could not afford in many instances to foreclose and realize the loan losses.

Another factor explaining some of the difference in the timing of write-offs between FCS and commercial banks may be the March 1986 Federal commercial bank regulators' policy initiative to assist banks experiencing heavy losses due to adverse developments in the farm and energy sectors. One part of this policy encouraged banks to renegotiate problem loans on more favorable terms to their troubled borrowers. Another part reinforced the incentive for bankers to work with their cash-strapped borrowers by changing the way renegotiated debt is reported. Agricultural banks have been aggressively using loan restructuring as a way of cutting future loan losses.

FmHA exercised a policy of extreme loan foreclosure forbearance into 1985 and the result was very low farm loan losses by the agency. FmHA increased foreclosures in 1986 and 1987, but a policy of considerable forbearance continued because the agency's activities were restricted by both Congress and the courts. The outcome was low reported loan losses, but an accumulating amount of delinquent loans.

FmHA is beginning to resolve the $8.3-billion in delinquent loan volume that accumulated during the 1980's. The Agricultural Credit Act of 1987 gave FmHA extensive guidelines to resolve its problem. FmHA now has the authority to foreclose on delinquent loans, after a complex set of restructuring rules fails to assist the borrower, including forgiving some principal and interest.

Commercial Banks

Agricultural banks are bouncing back from the mid-1980's farm financial crisis. Based on first-half 1988 results, their return on assets are up more than 40 percent from 1987 and up 150 percent from 1986. After peaking in mid-1986, delinquency rates for both farm production loans at all commercial banks and total loans at agricultural banks are sharply down. While agricultural bank performance has not returned to the boom era of the late 1970's--early 1980's, agricultural banks are now outperforming their small nonagricultural counterparts.

Nationally, agricultural banks have more than ample deposits to support new loans, although loan-deposit ratios are beginning to climb as the demand for farm loans rises. At mid-1988, loans amounted to 54 percent of deposits at agricultural banks, up 1.3 percent from mid-1987. Loan-deposit ratios are still higher and growing faster at the Nation's small nonagricultural banks. So agricultural banks are relatively more liquid and able to extend new credit with more ease.

There are two generally accepted definitions of agricultural banks. The Federal Deposit Insurance Corporation (FDIC) identifies agricultural banks as those with farm loans accounting for 25 percent or more of their loan portfolios. The Federal Reserve Board (FRB) identifies a bank as agricultural if its ratio of farm loans to total loans exceeds the unweighted average of such ratios at all commercial banks on a given date (16.09 as a percent on June 30, 1988).

The less restrictive FRB definition classifies 4,468 banks as agricultural banks, over 1,000 above the more limiting FDIC definition. Although neither definition imposes a size limit, almost all banks identified as agricultural by these definitions have less than $500 million in assets. So nonagricultural banks with less than $500 million in assets make up a useful peer group for comparisons.

Unless otherwise noted, the FRB definition is used here because the banks it identifies hold a majority of commercial bank-supplied farm credit. As of mid-1988, these banks held 53 percent of the real estate secured farm loans and about 59 percent of the farm loans not secured by real estate.

For the last 6 years, the number of agricultural banks has been declining at a faster rate than the number of nonagricultural banks. As of mid-1988, there were 8.4 percent fewer commercial banks than in 1982, while the number of agricultural banks (FRB definition) shrank by 13.3 percent. Liquidations and mergers accounted for much of the faster agricultural bank decline, but some banks simply quit specializing in farm finance.

Despite the farm financial stress of the mid-1980's, commercial banks are not making major portfolio changes to reduce their exposure to agricultural credit risk. Farm loans at agricultural banks averaged 35.6 percent of their total loans at mid-1988, up slightly from 35.4 percent a year earlier. Commercial banks remain good sources of credit for farmers in solid financial positions.

Domestic farm loans at all commercial banks grew 2.9 percent between mid-1987 and mid-1988 to $45.5 billion, the first increase since 1984. Farm loans backed by real estate grew 9.9 percent, while loans not backed by real estate fell 0.3 percent. Banks have been aggressively expanding their market share and are now the largest suppliers of farm credit.

Most of the shift to loans secured by real estate reflects banks' desires to improve the collateral behind short-term production and equipment loans, not loans to finance new farmland purchases. A survey conducted in early 1987 showed that most new farm loans secured by real estate at commercial banks were for the extension and recollateralization of short-term loans, not new land purchases. Moreover, to the extent the banks write farm mortgage loans, the mortgages have flexible interest rates. Going into 1988, 67 percent of loans at agricultural banks repriced (i.e., the interest rate changed) in a year or less, and only 9 percent of the loans had maturities greater than 5 years.

As of mid-1988, estimated farm nonreal estate loan delinquencies at all banks were down $1.9 billion from the mid-1986 peak. At the peak, about 10.3 percent of all bank-held farm nonreal estate loans were delinquent; by mid-1988, 5.5 percent of such loans were delinquent (table 4). Most of the decline was in the nonaccrual category which fell as banks recognized losses and wrote off the loans. Delinquent farm nonreal estate loans at midyear were slightly below 1983 levels, but much above levels experienced in the late 1970's and early 1980's. Because nonreal estate loan volume fell the delinquency rate still exceeded the 1983 rate.

Total loan delinquencies at agricultural banks also fell. And the delinquency rates were below 1983 rates, when the farm financial crisis began hitting the banks. As of mid-1988, 4.4 percent of loans at agricultural banks were delinquent, down from the 7.0 percent mid-1986 peak.

The improving farm economy combined with turbulence in energy-related economies and stress in selected nonfarm real estate markets has altered agricultural bank-nonagricultural small bank comparisons. Loan quality, as shown by total loan delinquency rates, was identical for agricultural and small non-agricultural banks in mid-1983 (table 5). Delinquency rates ballooned at agricultural banks relative to their nonfarm counterparts by in June 1984. By mid-1986, rates at agricultural banks were 2.1 percentage points higher than at small nonagricultural banks. But the spread narrowed to 1.2 percentage points by mid-1987. As of mid-1988, delinquency rates were only 0.3 percentage points higher for agricultural banks, and the rates for both groups of banks were below their 1983 rates.

Delinquency rates at small nonagricultural banks also fell in the first half of 1988. While they had been strong performers throughout the 1980's in aggregate, their performance was marred by the depression in the energy belt during 1985-88. But these banks in the energy belt--Texas, Oklahoma, Louisiana, Kansas, and Colorado--seem to be stabilizing: their delinquent loan rates declined slightly in the first half of 1988.

Falling net charge-offs of agricultural nonreal estate loans show the strength of the farm sector's recovery. Commercial banks' net charge-offs of these loans fell to $535 million in 1987 from the $1.3-billion peak in 1985. And the banks charged-off only $71 million in the first half of 1988, much below the $306 million charged-off during the first half of 1987.

Falling farm nonreal estate net loan charge-off rates and falling net charge-off rates for all loans at agricultural banks confirm that banks tied to agriculture are almost back to where they were before the farm financial crisis (table 6). By mid-1988, net charge-off rates for farm nonreal estate loans had fallen 91 percent from the peak at the end of

Table 4--Estimated delinquent farm production loans as a percentage of total farm production loans: commercial banks, 1983-88 1/

Type of loan	June 1983	June 1984	June 1985	June 1986	June 1987	June 1988
	Percent					
Total delinquent	4.7	6.5	8.6	10.3	8.1	5.5
Past due 30-89 days and still accruing	1.3	1.5	1.7	1.7	1.3	1.0
Nonperforming	3.4	5.0	6.9	8.6	6.7	4.5
Past due 90 days or more and still accruing	1.3	1.5	1.7	1.8	1.3	0.7
Nonaccrual	2.1	3.5	5.3	6.8	5.4	3.7

1/ Data are estimates of national percentages for farm nonreal estate loans. Estimates from June 1985 onward are based on reports from banks holding approximately 92 percent of such loans. Previously, only large banks, which held about one-fourth of these loans, reported data for the nonaccrual category of these loans. In order to ensure comparability, the category was estimated for nonreporting banks by Board of Governors of the Federal Reserve System research staff. Data in this and subsequent tables are weighted by bank asset size.

Source: Melichar, Emanuel, "Agricultural Finance: Turning the Corner on Problem Farm Debt," Federal Reserve Bulletin, Board of Governors of the Federal Reserve System, July 1987, updated on August 1987, and updated in September 1988 by Nicholas Walraven, FRB staff.

Table 5--Delinquent loans as a percentage of total loans by type of bank, 1983-88

Date and type of bank	Nonperforming loans			Past due 30-89 days and still accruing	Total delinqent loans
	Non-accrual	Past due 90 days or more and still accruing	Total non-performing		
	Percent				
June 30, 1983					
Agricultural	1.0	1.6	2.7	2.0	4.6
Nonag small banks 1/	1.2	1.3	2.5	2.2	4.6
June 30, 1984					
Agricultural	1.6	1.6	3.2	2.1	5.3
Nonag small banks	1.1	1.0	2.1	2.0	4.0
June 30, 1985					
Agricultural	2.5	1.6	4.1	2.2	6.4
Nonag small banks	1.4	.9	2.3	2.2	4.5
June 30, 1986					
Agricultural	3.1	1.6	4.7	2.2	7.0
Nonag small banks	1.6	1.0	2.6	2.3	4.9
June 30, 1987					
Agricultural	2.6	1.2	3.8	1.9	5.7
Nonag small banks	1.7	.8	2.5	2.0	4.5
June 30, 1988					
Agricultural	1.9	.8	2.7	1.7	4.4
Nonag small banks	1.5	.7	2.2	1.9	4.1

1/ Banks with less than $500 million in assets which were not agricultural by the FRB definition.

Sources: Johnson, James, Emanuel Melichar, and C. Edward Harshbarger, "Financial Condition of the Farm Sector and Financial Institutions," paper presented at the symposium on Financial Stress in Agriculture: Issues and Implications, Kansas City, MO., Nov. 24, 1986, updated by Nicholas Walraven, FRB Staff, in December 1988, and calculated from the Report of Condition and Report of Income files, Board of Governors of the Federal Reserve System.

Table 6--Net loan charge-offs by type of loan and type of bank, 1983-88

Date	Type of loan and type of bank		
	Net loan charge-offs as a percent of total loans--agricultural banks	Net loan charge-offs as a percent of total loans-nonag small banks	Net charge-offs of farm production loans as a percent of production loans--all insured commecial banks 1/
	Percent		
June 30, 1983	0.30	0.28	NA
Dec. 31, 1983	.63	.38	NA
June 30, 1984	.39	.23	.7
Dec. 31, 1984	.83	.37	1.6
June 30, 1985	.72	.29	1.3
Dec. 31, 1985	1.40	.52	2.2
June 30, 1986	.86	.67	1.7
Dec. 31, 1986	1.36	.36	1.9
June 30, 1987	.54	.38	1.0
Dec. 31, 1987	.69	.48	.8
June 30, 1988	.30	.35	.2

NA = Not available.

1/ Data are estimates of national charge-offs of farm nonreal estate loans, based on reports from banks which hold about 92 percent of these loans. Additional uncertainty arises as to these estimates because small banks report only charge-offs of "agricultural" loans as defined by each bank for its internal purposes. Banks first reported these data in the March 1984 Report of Income.

Sources: Melichar, Emanuel, "Agricultural Banking Experience, 1985," Board of Governors of the Federal Reserve System, March 1986, revised appendix data as of November 1986, updated by Nicholas Walraven, FRB Staff, in August 1988, and computed from the Report of Condition and Report of Income files, Board of Governors of the Federal Reserve System.

1985. And net charge-off rates for all loans at agricultural banks fell almost 79 percent during the same period. Charge-off rates at nonagricultural small banks fell 48 percent in the first half of 1988 from their mid-1986 peak, and are now slightly higher than charge-off rates at agricultural banks.

Rates of return also confirm that 1987 and 1988 were rebound years for agricultural banks. Agricultural banks' rate of return on equity (ROE), after bottoming out at 5.1 percent in 1986, rose to 7.6 percent in 1987 and is estimated to reach 10.6 percent in 1988 (table 7). Nonagricultural small banks' ROE hit bottom in 1987, a year after agricultural banks, and is now also rising. But the agricultural banks' ROE is higher and growing faster than the small nonagricultural banks' ROE. Rates of return on assets (ROA) at agricultural and small nonagricultural banks show the same pattern.

After deteriorating slightly in 1986, capital positions at agricultural banks improved in 1987 and the first half of 1988. After dipping to 9.5 percent in 1986, total (primary plus secondary) capital at agricultural banks grew to 9.8 percent of assets in 1987 and set a record of 10.1 percent in first-half 1988. The slight dip in 1986's capital ratio reflects net loan charge-offs exceeding loss provisions for the year. While capital positions at small nonagricultural banks also fell in 1986 and improved in 1987, they held steady through the first half of 1988. The measure of bank capital includes equity and the allowance for loan losses but excludes intangibles like goodwill. Rising capitalization rates at agricultural banks improves their ability to sustain unexpected shocks to the farm sector, such as last year's drought.

Reflecting farm bankers' improved expectations, annual provisions for loan losses fell at agricultural banks to 1.35 percent of loans in 1987 from the 1986 peak of 2.44 percent (table 7). Annual provisions as a percent of loans are also down at small nonagricultural banks, but by a smaller proportion. And the differential between provisioning rates at the two groups of banks is shrinking. Provisions for loan losses are cash taken from current gross income and added to the loan loss reserve account.

Throughout the 1980's farm financial crisis, a minority of agricultural banks accounted for a disproportionate share of the problems of all farm banks. But the share of agricultural banks taking the largest losses shrank in 1987, after growing for a number of years. At the end of 1986, 30.6 percent of these banks reported net charge-off rates in excess of 2.5 percent of loans. By the end of 1987, only 15.9 percent of these banks reported charge-off rates in excess of 2.5 percent of loans. Generally speaking, loss rates exceeding 2.5 percent of loans go through income and start eroding capital.

In addition, the proportion of agricultural banks with low charge-off rates has grown. While 38.8 percent of agricultural banks reported charge-off rates under 1.0 percent of loans at the end of 1986, 58.7 percent reported charge-off rates under 1.0 percent a year later.

Through 1984-87, agricultural bank problems were concentrated in 12 contiguous heartland States: Colorado, Iowa, Kansas, Minnesota, Missouri, Montana, Nebraska, North Dakota, Oklahoma, South Dakota, Wisconsin, and Wyoming. As late as mid-1987, agricultural banks in the 12-State

Table 7--Selected bank performance measures by type of bank, 1982-88 1/

Performance measure	1982	1983	1984	1985	1986	1987	1988 Estimated
				Percent			
Rate of return on equity capital							
Agricultural banks	14.0	11.0	9.0	6.0	5.1	7.6	10.6 2/
Nonag small banks	12.0	12.0	12.0	11.0	8.3	8.1	9.1 2/
Rate of return on total assets							
Agricultural banks	1.1	1.0	.7	.5	.4	.7	1.0 2/
Nonag small banks	.9	.9	.8	.8	.6	.6	.7 2/
Provisions for loan losses as a percent of total loans							
Agricultural banks	.79	1.09	1.47	2.42	2.44	1.35	--
Nonag small banks	.77	.79	.77	1.02	1.26	1.03	--
Capital as a percent of assets							
Agricultural banks	9.3	9.4	9.5	9.6	9.5	9.8	10.1 3/
Nonag small banks	8.5	8.4	8.5	8.5	8.4	8.8	8.8 3/

1/ Rate of return on equity is net income after taxes as a percent of the average of total equity capital at the beginning and end of the year. Rate of return on total assets is net income after taxes as a percentage of total assets on December 31. 2/ 1988 numbers are first-half data at annual rates. 3/ First half data. The 1988 figures are based on an updated definition of total capital. The changes are minor and do not, for the most part, affect small banks' capital levels.

Source: Melichar, Emanuel, "Agricultural Banking Experience, 1985," Board of Governors of the Federal Reserve System, March 1986, revised appendix data as of November 1986, updated in September 1988 by Nicholas Walraven, FRB Staff, and calculated from the Report of Condition and Report of income files, Board of Governors of the Federal Reserve System.

region had lower ROE's, lower ROA's, and worse loan delinquency rates than agricultural banks nationally. But by mid-1988, the region's agricultural banks had clearly rebounded with a 1.0-percent annualized ROA and a 10.8- percent annualized ROE, equalling and surpassing agricultural banks nationally.

The agricultural bank rebound in this 12-State region would have been stronger except that it includes three States--Colorado, Kansas, and Oklahoma -- that are also in the energy belt. Since the price of oil crashed in early 1986, most of the Nation's banking problems have been in the five-State energy belt--Texas, Oklahoma, Louisiana, Colorado, and Kansas. Roughly one-quarter of all agricultural banks are headquartered in the energy belt.

While agricultural banks typically do not also make large commitments to energy producers, agricultural banks in the energy belt have been influenced by the oil price cycle. In the first half of 1987, agricultural banks in the belt did markedly worse than agricultural banks nationally. While agricultural banks in the belt are now rebounding, the rebound is anemic. They posted an annualized ROE of 7.7 percent at mid-1988, up from 5.9 percent a year earlier, but below the national agricultural bank ROE of 10.6 percent.

During 1982-88, banking problems were dominated by agricultural- and energy-related loan losses. But improving agricultural banking conditions lowered both the number and proportion of troubled agricultural banks. Two indicators most commonly used to identify troubled banks are: banks with nonperforming loans greater than capital (called weak banks); and banks making the FDIC's official problem list. Research has shown that weak banks are at greatest risk of failure in the near future.

By mid-1988, agricultural banks accounted for 19.8 percent of the 319 weak banks (table 8). This is a marked improvement from mid-1985, when 56.3 percent of weak banks were agricultural. The shrinking number of weak agricultural banks has more than offset the growing number of weak non-agricultural banks. The total number of weak banks is down almost 18 percent from the December 1986 peak.

Table 8--Weak commercial banks, 1983-88 1/

Date	Type of bank: Agricultural	Type of bank: Nonagricultural	Total banks
	Number		
June 30, 1983	34	93	127
Dec. 31, 1983	40	102	142
June 30, 1984	68	85	153
Dec. 31, 1984	93	94	187
June 30, 1985	144	112	256
Dec. 31, 1985	141	130	271
June 30, 1986	197	167	364
Dec. 31, 1986	158	230	388
June 30, 1987	133	247	380
Dec. 31, 1987	84	241	325
June 30, 1988	63	256	319

1/ Weak banks are defined as those with nonperforming loans greater than total capital. Loans past due 90 days or more plus loans in nonaccrual status are considered nonperforming.

Source: Calculated from the Report of Condition and Income files, Board of Governors of the Federal Reserve System.

Weak agricultural and weak nonagricultural banks have become more concentrated in the energy belt. As of mid-1988, 37 of the 63 weak agricultural banks and 219 of the 256 weak nonagricultural banks were in the belt. At mid-1987, 60 percent of weak banks were in the belt; a year later, over 80 percent were in the 5-State region.

A more widely known indicator of severe bank stress is the FDIC's official problem list -- banks judged to be in serious difficulty and in need of close scrutiny by bank regulators. Agricultural banks (25 percent definition) on the problem list, after peaking at 609 in January 1987, fell by nearly 50 percent during 1988 (table 9). Yet the number of nonagricultural banks on the list grew by 8.3 percent during 1988.

Over 800 commercial banks failed during 1983-88, and 289 of them were agricultural banks (table 9). In 1988, 221 banks failed. Of these, 22 received open bank assistance, where the FDIC provided a cash infusion to avert closure, and 199 were declared insolvent and closed. In 1988, agricultural banks made up 19 percent of the failures, down from 59 percent in 1985. About $486 million in agricultural loans were held by banks that were closed in 1988, up about $136 million from 1987.

As with other indicators of bank stress, changing closure patterns show how problems induced by the contraction in the energy sector have overwhelmed problems caused by the farm sector. In 1988, 81 percent of all closures were in the five-State energy belt, up from 63 percent in 1987. But agricultural banks have also suffered from volatile oil prices: 58 percent of agricultural banks closed in 1988 were in the energy belt, up from 47 percent in 1987.

Farm Credit System

The FCS's financial condition stabilized in 1988, reflecting the federally backed assistance provided by the 1987 Act and an improving farm economy. Over the past 12 months, loan volume for the FCS as a whole stabilized. By the end of third-quarter 1988, gross loans outstanding for the FCS were valued at $52.6 billion (table 10). Farm Credit System net income for the first three quarters of 1988 rose to $434 million, much improved from the net loss of $197 million of a year earlier. A major factor leading to negative net income in 1985 through 1987 was the build-up of the loan loss allowance in anticipation of heavy defaults. But defaults did not occur to the extent anticipated. Positive net income has now been achieved largely through reversal of the funds previously set aside to cover loan losses. Net interest income rose 62 percent, $571 million in 1988 versus $353 million a year earlier, mostly because of the withdrawal of $515 million from the loan loss allowance, in contrast with a net addition of $37 million in 1987. Excluding the Jackson FLB, all

Table 9--Problem and failed commercial banks by type of bank and by region, 1983-88 1/

Item	All banks								Agricultural banks 2/							
	1983	1984	1985	1986	1987	1988	Total	Share 7/	1983	1984	1985	1986	1987	1988	Total	Share 7/
Problem banks 3/	603	800	1098	1457	1559	1394	--	--	106	288	437	600	513	261p	--	--
	----Number----							Pct.	----Number----							Pct.
Total failed 4/	44	78	118	144	202	221	807	--	7	31	69	66	75	41	289	--
OBA's 5/	0	1	2	7	19	22	51	--	0	0	1	3	4	5	13	--
Total closures 6/	44	77	116	137	183	199	756	100	7	31	68	63	71	36	276	100
Closed banks location																
Northeast	1	0	2	0	3	2	8	1	0	0	0	0	0	0	0	0
Lake States	1	5	7	6	10	8	37	5	0	2	7	4	10	5	28	10
Corn Belt	7	12	23	21	16	11	90	12	2	6	20	18	15	8	69	25
Northern Plains	3	13	26	21	18	9	90	12	2	10	24	20	16	8	80	29
Appalachia	13	13	5	4	1	0	36	5	0	2	1	2	0	0	5	2
Southeast	1	3	3	4	5	3	19	3	1	1	0	0	0	0	2	1
Delta States	1	4	1	8	15	11	40	5	1	2	0	1	4	1	9	3
Southern Plains	4	11	25	42	81	136	299	40	0	5	11	13	22	13	64	23
Mountain	4	5	15	21	23	14	82	11	1	3	3	4	4	1	16	6
Pacific	9	11	9	10	11	5	55	7	0	0	2	1	0	0	3	1
Stressed energy bank region 8/	6	21	39	71	116	162	415	55	0	12	19	29	33	21	114	41

P=Preliminary.
1/ Excludes banks headquartered in U.S. possessions and territories. 2/ A bank was classified as an agricultural bank if it has an above-average farm loan ratio in the December of the preceding year, except for the problem bank category where an agricultural bank is classificated using the FDIC (25%) definition. 3/ Problem bank classification by FDIC is based on the CAMEL rating system used in individual bank examinations. CAMEL is a mnemonic for the key attributes of a bank's condition. They are: capital adequacy, asset quality, management ability, earnings power, and liquidity, Each bank gets an overall rating based on its performance in these five categories. Ratings range from 1 (sound in almost every respect), to 5 (high probability of failure). Banks with ratings of 4 (serious weakness and potential for failure) or 5 are placed on the problem list. FDIC-classified problem mutual savings banks are excluded. Savings and loan associations are not regulated by the FDIC and thus do not appear on its problem list. Data are as of December 31. 4/ Bank failures are all FDIC-insured commercial banks that are declared insolvent and closed due to financial difficulties, plus banks receiving open bank assistance. 5/ OBA's are banks receiving open bank assistance, financial assistance by FDIC in order to "prevent imminent failure." 6/ Bank closures are FDIC-insured commercial banks that are declared insolvent and closed by their respective chartering authorities. 7/ Percentages are based on aggregations of banks for 1983 through 1988. 8/ Includes bank closures from Colorado, Kansas, Louisiana, Oklahoma, and Texas.

Source: Calculated from information provided by the Federal Deposit Insurance Corporation and the Report of Condition and Report of Income files, Board of Governors of the Federal Reserve System. Problem list data are from the Office of Research, Federal Deposit Insurance Corporation.

Table 10--Farm Credit System combined financial data, September 30, 1987, through September 30, 1988

Item	Sept. 1987	Dec. 1987	March 1988	June 1988	Sept. 1988
Statement of condition			Million dollars		
Loans	53,638	52,498	52,814	53,110	52,583
Less allowance for loan losses	3,217	2,951	2,744	2,567	2,400
Net loans	50,421	49,547	50,070	50,543	50,183
Cash and investment	8,237	9,408	10,266	9,031	8,103
Other property owned	983	876	835	709	702
Other assets	2,718	2,406	2,082	2,341	2,622
Total assets	62,360	62,238	63,252	62,623	61,610
Total liabilities	57,349	57,208	58,178	57,384	56,310
Protected borrower capital including surplus	NA	NA	3,770	3,762	3,714
Other capital, including surplus	5,011	5,030	1,304	1,477	1,586
Total liabilities and capital	62,360	62,238	63,252	62,623	61,610

NA = Not applicable.

Sources: Farm Credit Corporation of America, Summary Report of the Conditions and Performance of the Farm Credit System, Quarters ended September 30, 1987 through September 30, 1988.

banks, combined with their related associations, were reporting positive net income by the third and fourth quarters of 1988.

Due to a strengthening farm sector, high-risk loans are now a smaller portion of the total FCS loan portfolio. Funds set aside to cover loan losses by the end of the third quarter were 19 percent less than the beginning of 1988, down to $2.4 billion. Of this decrease, $82 million, or 15 percent went to cover loan charge-offs and $469 million, or 85 percent, was withdrawn because loan quality improved. Loan quality is better because of a relatively strong farm income situation, and higher land values. For example, nonaccruing and other high-risk loans declined 10 percent during 1988.

While the value of total loans covered by the allowance dropped from 5.6 percent to 4.6 percent over 1988, the ratio of nonaccrual and other high-risk loans to the allowance remained fairly constant. Nonaccrual loans are primarily those that are 90 days or more past due and are not adequately secured, while other high-risk loans are primarily equally past due but have remained adequately secured.

Another factor contributing to the stabilization of the System's financial position has been the decrease in nonearning assets. Due primarily to strong loan restructuring efforts as mandated by the 1987 Act, restructured loan volume increased 37 percent over the first 9 months of 1988.

The System's capital-asset ratio improved significantly during 1988 due to more capital and fewer assets. Reduction in assets came through a roughly 14-percent decline in liquid assets (cash and investments) as loan volume stabilized. At the same time, total capital increased with the inflow of federally backed financial assistance under the 1987 Act. Total capital increased even though protected capital decreased. Protected capital is the borrower stock issued before October 5, 1988, guaranteed under the 1987 Act to be retired at book value. Stock issued since that date is not protected, and is considered part of permanent capital.

Though overall System-wide performance stabilized during the year, there was significant disparity between bank types and between districts. Loan volume for the Banks for Cooperatives (BC's) increased during the year, though volume at the Farm Credit Banks (FCB's) continued to decline. FCB's are institutions that arose from mergers between the FLB's and FICB's in each district on July 1, 1988. The Jackson FLB was put into receivership, the first time a Land Bank had been declared insolvent.

By the end of third-quarter 1988, loan volume of the combined FLB/FLBA and FICB/PCA groups had declined 3.2 percent since the beginning of the year, from roughly $44.3 to $42.8 billion, (table 11). Because of the mergers between FLB's and FICB's and consequent redistribution of capital between banks and associations, both "earned surplus" (roughly analogous to net worth), and the portion of earned surplus reported as impaired, dropped in the second half of 1988. At the end of 1987, FLB/FLBA's reported a net deficit of $285 million while the FICB/PCA's reported a surplus of $1.4 billion. By the third quarter of 1988, the combined institutions reported a surplus of $1.6 billion.

The Farm Credit Banks' capital stock increased by 130 million through the first three quarters of 1988. The FCS Financial Assistance Corporation purchased $214 million of preferred stock of troubled institutions. If the Corporation had not made this purchase, capital stock would have declined by $84 million.

Net income for the FCB's as a group increased from a negative $246 million for the first 9 months of 1987 to a positive $583 million for the same period in 1988. The gain was due in part to a rise in net interest income. Perhaps more significant, however, was the $522 million taken from the loan loss allowance and added back into income. The banks and associations specializing in credit for production, FICB/PCA's, in general did better than the FLB/FLBA's concentrating in real estate loans. PCA net income was up dramatically, from $12 million at the end of the third quarter of 1987 to $86.5 million 12 months later. PCA net income, without taking into account provisions for loan losses, would have been $48.5 million at the end of the third quarter, 1988, a substantial improvement from the negative $6 million of a year earlier. This was in part due to improved loan quality. Though PCA loan volume dropped, on a percentage basis nonaccrual loans dropped even more. Nine of the 12 districts reported decreases in nonaccrual loans during the third quarter of 1988. The capital-asset ratio improved slightly at PCA's during this period because of a decline in total assets and an increase in net worth. On the asset side of the balance sheet, loan volume decreased and liquid investments increased.

The BC's also had a relatively successful year during 1988. Though loan volume decreased slightly during the third quarter, volume for the year ending September 30 at the BC's was up 18.3 percent, from roughly $8.2 to $9.7 million. The capital-asset ratio, however, was down 11 percent by the end of the period. Nonaccruals rose from a year earlier by $4 million, to total $20 million. The majority of deterioration occurred in the Texas BC. The Texas BC also brought down net income for the group by reporting a $14.6 million provision for loan losses during the third quarter of 1988.

Performance by district was mixed. Wide variations in income between districts was due to a combination of uneven farm performances across districts and specialization of types of loans within the institution's portfolio (table 12). For example, the FCB and associations of the Baltimore were more successful than the district BC, but in Louisville

Table 11--Farm Credit System bank groups selected financial data, 1987-88

Item	Statement of conditions			
	FLB's/FLBA's/ FICB's/PCA's		BC's	
	Sep. 30 1988	Dec. 31 1987	Sep. 30 1988	Dec. 31 1987
	Million dollars			
Loans	42,849	44,273	9,734	8,224
Allowance for loan losses	(2,251)	(2,810)	(149)	(141)
Net loans	40,598	41,463	9,585	8,084
Other property owned	700	871	2	5
Other assets	7,991	8,789	2,806	3,046
Total assets	49,290	51,123	12,393	11,135
Total liabilities	44,563	47,126	11,352	10,104
Capital stock and participation certificates	3,081	2,951	737	733
Surplus	1,646	1,046	304	298
Total liabilities and capital	49,290	51,123	12,393	11,135

	Statement of operations			
	FLB's/FLBA's/FICB's/PCA's		BC's	
	For the 9 months ended September 30			
	1988	1987	1988	1987
Net interest income	452	252	119	95
Provision for loan losses and losses on other property owned	(522)	37	8	1
Other expenses, net	438	461	46	43
Intra-System financial assistance income (expense), net	214 1/	---	(9) 2/	---
Income (loss) before extraordinary item	750	(246)	57	51
Extraordinary loss on the repurchase of debt	167	---	---	---
Net income (loss)	583	(246)	57	51

1/ Represents gain on reversal of third quarter 1986 capital preservation accruals assumed by the Financial Assistance Corporation net of a loss of $73,653 from the write-offs of investments in the Financial Assistance Corporation. All such amounts are eliminated in combination. 2/ Represents the loss from the write-off of investments in the Financial Assistance Corporation. These amounts are eliminated in combination.

Source: Federal Farm Credit Banks Funding Corporation Quarterly Information Statement -- Third Quarter 1988.

Table 12--Farm Credit System district financial results for first nine months 1988

District	FCB & Assns.	BC	Dist. Net	Loss Rev.1/	CPA Rev. 1/	1-time Assmt. 2/	Govt. Aid 2/
	Million dollars Net earning (+) or loss (-)						
Springfield	20.5	2.0	22.5	1.6	26.0	9.3	----
Baltimore	33.0	-0.1	32.8	6.8	56.9	35.3	----
Columbia	147.6	4.0	151.6	57.8	95.4	6.4	----
Louisville	-20.8	6.7	-14.1	61.0	----	16.4	90.0
Jackson	1.6 3/	10.3	12.2	2.7	----	----	----
St. Louis	46.7	6.5	53.2	68.2	----	40.5	----
St. Paul	76.0	19.0	95.0	96.0	----	----	----
Omaha	74.1	5.5	79.6	147.8	----	----	104.0
Wichita	70.0	9.0	79.0	76.3	----	29.9	----
Texas	47.0	-11.5	35.5	---- 4/	74.4	65.0	----
Sacramento	101.7	2.0	103.7	13.5	65.0	----	----
Spokane	114.8	1.7	116.5	23.5	97.0	----	----

1/ Reversals of provision for loss and Federal Land Bank Capital Preservation Agreement (CPA) assessments treated as income. 2/ One-time assessments for FCS Assistance Corporation and government aid via Assistance Board treated as expense. 3/ Federal Intermediate Credit Banks and Production Credit Associations. 4/ Increased provision for losses by $14.6 million in the third quarter.

Source: Agricultural Credit Letter, Webster Communications Corporation, Volume 4, Letter No. 5, December 1, 1988, p. 3.

the reverse was true. District net income ranged from $151.6 million in Columbia to minus $14.1 million in Louisville.

Some banks showed considerable improvement in their loan performance during 1988 (table 13). Columbia and St. Louis has increased both loan volume and loan quality in the past year. St. Paul, after losing almost $1.9 billion in performing loan volume in fiscal 1987 began what looks like the start of a turnaround, with performing loans up, and nonaccruals and other high-risk loans down. As financial assistance begins to arrive for the FCB, total loan volume has picked up as well.

Both the Louisville and Omaha districts lost about $500 million in performing loans during fiscal 1987, but managed in 1988 to avoid slipping much further (table 13). Omaha went through a major drive to restructure loans, while Louisville maintained a stable volume of restructured loans throughout the year. Total loan volume in Springfield was lower than a year earlier, but performing loan volume had begun to turn around. The Sacramento increased its total volume though loan quality dipped slightly.

Other districts have still not seen much of an upswing. Both performing and total loans continued to fall at the Spokane district. The drop in performing loan volume over the past 2 years now totals roughly $580 million for this district.

While total loan volume increased in Baltimore, its portion of performing loans decreased. Loan volume is improving somewhat at the Wichita district, but with no increase in performing loan volume. Performing loan volume at the Texas district began slipping in mid-1988, as loan quality deteriorated, in the BC, but by the end of the third quarter remained in generally the same condition as 12 months earlier.

On May 20, 1988, the Jackson FLB and its 90 FLBA's were placed in receivership. This was the first time in the history of the Farm Credit System that any of its FLB's have been closed. The Jackson district covers Alabama, Louisiana, and Mississippi. At the time of its closing, the Jackson FLB served 2,200 customers and held $2 billion in assets; it was the third smallest of the 12 FLB's.

The Jackson bank reported a $44.3-million loss during 1987, despite improved farm conditions, and an average loss of $4.7 million a month during 1988. Roughly 40 percent of its loans were in high-risk or nonaccrual status. The FCA estimated the Jackson bank would need a larger capital infusion than it would be able to repay within the 15 years required by the Agricultural Credit Act of 1987.

By the time of its closing, the Jackson bank had virtually no liquid assets (table 14). In addition, it had a greater than average inventory of property, acquired primarily through

Table 13--Farm credit system loan performance status by quarter, September 30, 1987 through September 30, 1988

Loan status by lending unit	District												CBC 1/	FCS Totals
	Spring-field	Balti-more	Columbia	Louis-ville	Jackson	St. Louis	St. Paul	Omaha	Wichita	Texas	Sacra-mento	Spokane		
	Million dollars													
September 30, 1987														
Performing	1,427	2,430	4,003	3,112	1,721	3,114	4,764	3,017	3,404	2,971	5,270	2,676	4,134	42,043
Restructured	0	1	11	23	4	24	596	134	42	6	185	12	6	1,044
Other high risk	22	53	324	442	341	506	1,410	526	366	134	357	145	9	4,635
Nonaccruals	19	46	418	517	473	668	1,122	741	556	182	638	619	1	6,001
Total	1,469	2,530	4,755	4,094	2,539	4,312	7,891	4,418	4,369	3,293	6,450	3,453	4,150	53,723
December 31, 1987														
Performing	1,454	2,470	4,012	2,941	1,661	2,980	4,854	3,307	3,400	3,013	5,057	2,595	4,206	41,950
Restructured	1	12	13	26	5	26	711	190	64	9	241	24	6	1,328
Other high risk	17	58	227	398	322	465	1,221	217	392	182	368	113	8	3,988
Nonaccruals	16	41	388	426	420	594	1,013	585	455	153	608	533	0	5,232
Total	1,488	2,581	4,540	3,791	2,408	4,065	7,799	4,299	4,311	3,357	6,274	3,265	4,220	52,498
March 31, 1988														
Performing	1,456	2,479	4,052	3,301	1,584	3,050	4,856	3,286	3,408	3,000	4,893	2,540	3,606	42,971
Restructured	1	16	14	20	10	17	761	293	64	5	218	24	6	1,449
Other high risk	13	61	194	121	352	443	1,116	283	389	139	362	130	53	3,600
Nonaccruals	14	34	373	376	367	523	953	443	399	166	643	505	1	4,796
Total	1,484	2,590	4,633	3,818	2,302	4,034	7,680	4,305	4,280	3,309	6,116	3,198	5,081	52,814
June 30, 1988														
Performing	1,498	2,559	4,090	3,410	1,612	3,409	4,978	3,499	3,458	2,882	4,979	2,583	4,983	43,940
Restructured	1	17	11	56	13	54	754	341	83	6	214	35	6	1,591
Other high risk	14	63	128	188	320	209	1,003	198	346	185	334	146	9	3,193
Nonaccruals	11	30	359	303	350	473	897	364	378	174	658	476	0	4,473
Total	1,525	2,670	4,588	3,957	2,295	4,145	7,6312	4,402	4,265	3,247	6,185	3,239	4,998	53,145
September 30, 1988														
Performing	1,554	2,592	3,983	3,370	1,649	3,354	4,924	3,376	3,481	2,867	4,887	2,582	5,140	43,761
Restructured	1	16	14	115	18	71	763	435	109	7	213	44	6	1,812
Other high risk	14	67	94	142	243	190	923	169	324	181	435	145	[illegible]	2,934
Nonaccruals	9	30	329	280	409	426	824	291	281	178	570	449	0	4,076
Total	1,578	2,705	4,420	3,907	2,319	4,041	7,434	4,271	4,195	3,233	6,105	3,220	5,153	52,583

1/ Central Bank for Cooperatives.

Sources: Farm Credit Corporation of America, Summary Report of Conditions and Performance of the Farm Credit System, Quarters ended September 30, 1987 through September 30, 1988.

Table 14--Comparison of balance sheets of the Jackson Federal Land Bank and the Farm Credit System combined, September 30, 1988

Item	Jackson FLB	Jackson FLB	FCS
	Million dollars	Percent of total assets	
Net Loans	1,299	84.7	81.4
Other property owned	57	3.7	1.1
Other assets	179	11.7	4.3
Cash and other investments	0	0	13.2
Total assets	1,535	100.0	100.0
System bonds and notes	1,610	104.9	88.2
Other liabilities	46	3.0	3.2
Capital stock and participation certificates 1/	135	8.8	2.8
Surplus (Deficit)	(257)	(16.7)	5.8
Total liabilities & capital	1,535	100.0	100.0

1/ Including protected borrower capital and preferred stock.

Source: Federal Farm Credit Banks Funding Corporation Quarterly Information Statement--Third Quarter 1988.

foreclosure, as well as a greater than average ratio of borrower stock to total assets.

Many FCS officials were reported to be surprised at the Jackson bank liquidation. A merger between the bank and another solvent institution had been presumed, but no System institution was willing to assume the Jackson FLB's portfolio, even with a pledge of financial assistance.

In December 1988, the Texas Farm Credit Bank became the sole buyer of loans held by the Jackson Land Bank by outbidding other System banks. The Texas bank acquired the Jackson district loans at a discount of 12.4 percent, bidding $1.1 billion on loans with a face value of $1.4 billion. According to the FCS, the discount was less and the yield to the receiver more than expected. The sale implies that the FCA now will extend the Texas Bank's jurisdiction into the three States covered by the Jackson district, and it is likely that the Jackson district FICB will eventually merge with the Texas FCB.

The Jackson bank's assets included $94.6 million of outstanding borrower stock protected by the Agricultural Credit Act of 1987. Holders of this stock are able to redeem it at par under the legislated assistance program. The expense of redeeming borrower stock and impairment of the Jackson bank's bonds and notes will be paid by other System institutions when the bailout loan is actually due.

The downward trend in interest income, particularly for FCB's, reverses as the financial assistance provided by the 1987 Act arrives at the banks. An Assistance Corporation was established to administer aid to the FCS under the 1987 Act. By the end of 1988, $690 million of debt had been issued to obtain the necessary funds. As of December 1988, the Assistance Board had authorized $40 million for the Jackson FLB to continue access to the debt market and $5 million to retire borrower stock at par; $90 million to the Louisville FCB; up to $110 to the Omaha FCB; $133.4 million for the St. Paul FCB, primarily to facilitate restructuring part of its high-cost debt; and $20.6 million for six PCA's in liquidation in the Spokane and Omaha districts to allow retirement of previously frozen borrower stock. Additionally, $258 million was earmarked to pay accruals recorded under the Capital Preservation Agreements during the third quarter of 1986.

The assistance had a direct and immediate impact. The Jackson FLB has been allowed to continue access to the debt market despite a level of collateral inadequate to meet statutory requirements. Assistance to the other FCB's has allowed them to refinance high-cost debt, drawing down their average funding cost and generate millions of dollars of savings over the next few years.

Farmers Home Administration

New lending activity under FmHA's farmer programs continued to trend downward in fiscal 1988. Direct (insured) and guaranteed farmer program obligations totaled $2.3 billion during the year, down 25 percent from $3.1 billion a year earlier (table 15). As recently as fiscal 1985, annual lending had been as high as $5.9 billion, the peak of the farm financial crisis. An improving farm economy and a new attitude toward less debt among farmers explains some of the lending decline at FmHA.

The decline in 1988 farmer program obligations did not stem from cuts in FmHA's total lending authority. Appropriations for the fiscal year totaled $4.5 billion, virtually unchanged from the previous year. However, some of the decline can be explained by cuts in lending authority for the popular direct Farm Ownership and Farm Operating programs. Combined lending authority for these programs dropped 32 percent from 1987's authority. Virtually all funds available for these programs were obligated by yearend.

Table 15--Farmers Home Administration farmer program obligations
September 30, 1982, to September 30, 1988

Date 2/	Obligations 1/				Outstanding principal of farmer programs 3/
	Total	Direct	Guaranteed	Share of total	
	----Million dollars----			--Percent--	---Million dollars ---
1982	4,113.9	4,062.7	51.2	1.2.	24,568.5
1983	3,070.7	3,000.1	70.6	2.3	24,607.2
1984	4,438.7	3,995.8	442.9 4/	10.0	26,093.2
1985	5,927.7	4,753.0	1,174.7	19.8	28,817.5
1986	4,367.5	2,807.9	1,559.6	35.7	29,240.4
1987	3,080.5	1,515.0	1,565.5	50.8	28,147.6
1988	2,320.7	1,065.8	1,254.9	54.1	28,242.6

1/ Obligations are the dollar amounts of funds loaned or guaranteed. 2/ Fiscal years. 3/ Total principal balance of loans guaranteed by FmHA and direct or insured FmHA loans at yearend. 4/ Includes $289.9 million in guaranteed Economic Emergency loans.

Source: Farmers Home Administration, 616 Report, 4067 Report, and 205 Report, various issues.

Obligations under FmHA's direct loan programs totaled $1.1 billion for fiscal 1988, down 30 percent from 1987, the lowest since 1974, and when adjusted for inflation the lowest in nearly 30 years. The decline in direct lending reflects a greater emphasis on guarantee lending as mandated by the Food Security Act of 1985. With loan guarantees, FmHA guarantees repayment of up to 90 percent of a loan made by a qualifying lender, if the farmer defaults. Funding for guarantees increased again in 1988, but unlike past years, lenders' use of them did not. Loan guarantee volume fell 20 percent in 1988, the first decline since they were elevated in importance 4 years earlier.

The drop in loan guarantee use and the greater funding of these programs partially explain why FmHA obligated only 52 percent of its total $4.5 billion lending authority for 1988. FmHA had increased funding for the guaranteed farm operating program to $2.2 billion, but only $893 million was obligated--$348 million less than the previous year.

Another explanation was the reduced use of the direct Emergency Disaster Loan Program (EM). Nearly $600 million was budgeted for this program, but only $30 million was loaned, the least since the 1950's, and sharply below the $5.1 billion loaned as recently as 1981. Tighter eligibility requirements and generally favorable growing conditions in 1987 explain much of the decline for 1988. Any increases in EM program use resulting from the 1988 drought will show up in fiscal 1989. The EM program provides low-cost loans for farmers suffering from natural disasters, such as drought and floods.

Despite the scale back in lending, FmHA, the "lender of last resort" for agriculture, remains a dominant farm lender with $25 billion in outstanding direct loans. FmHA still holds over 16 percent of outstanding farm debt (excluding households), whereas in the mid-1970's it held less than 6 percent. For nonreal estate debt, FmHA's role is even more prominent. Its share of such debt is now 22 percent, up from under 4 percent in the mid-1970's. In some states, FmHA supplies over 50 percent of farm nonreal estate credit needs.

FmHA's direct farmer loan program delinquencies were higher in 1988. However, much of the increase reflects a change in the way FmHA reports delinquent loans. Delinquent loan payments on June 30, 1988, stood at $8.7 billion, up 25 percent from June 30, 1987 (table 16). These delinquencies represented 34.5 percent of FmHA's outstanding direct loan volume. The outstanding principal on these delinquent loans totaled $13.4 billion, equaling half of FmHA's total direct farmer program debt outstanding.

The bulk of FmHA's loan delinquencies reside in the EM and the Economic Emergency (EE) programs. Together these programs accounted for $6.2 billion, or 74.6 percent of the total delinquent payments at fiscal yearend (table 17). The EE program has not been funded since 1984. It had provided credit to help farmers overcome economic hardship brought on by credit scarcity or a cost-price squeeze beyond their control.

Problems with the EE and ED programs run deep. Delinquent payments represent over 50 percent these programs' outstanding loan principal, while over 45 percent of their borrower cases are delinquent. Of the $6.2 billion of delinquent loan payments, over 98 percent have been delinquent for a year or more and 86 percent for more than 4 years. Much of this long-term delinquent loan volume is not collectable and will be reflected in future loan write-offs by the agency.

FmHA continued to report higher loan losses in fiscal 1988. Net farmer program write-offs for the year were $2.1 billion, compared with $1.2 billion in fiscal 1987. Loan write-offs will continue at a high pace as losses on long-term delinquent loans are finally recognized.

Table 16--Farmers Home Administration direct farmer loan program delinquencies, June 30, 1980, to June 30, 1988 1/

Date	Number of active cases 2/ (caseload)			Principal outstanding		
		Delinquent 3/			Delinquent 4/	
	Total	Total	Proportion	Total	Amount	Share of total
	--- Number ---		Pct.	-- Mil. dollars --		Pct.
1980	372,046	62,200	16.7	18.192.4	827.6	4.6
1981	423,134	84,955	20.1	22,905.4	1,592.9	7.0
1982	434,460	120,166	27.7	24,137.4	2,933.6	12.2
1983	436,611	146,251	33.5	24,410.2	4,131.8	16.9
1984	446,855	158,237	35.4	25,369.0	5,397.5	21.3
1985	455,561	165,344	36.3	27,786.3	6,384.8	23.0
1986	429,146	157,391	36.7	27,834.6	6,835.2	24.6
1987	396,910	143,270	36.1	26,252.3	7,005.8	26.7
1988	383,571	151,486	39.5	25,395.7	8,749.7	34.5

1/ June 30 of year shown to account for the annual cyclical trend in delinquencies. 2/ Duplicated cases because some borrowers have loans under several different programs. Prior to 1988 active cases excluded those borrowers who are in foreclosure, bankruptcy, or liquidation status. 3/ Prior to 1988 a case was considered delinquent when a payment was more than $10 and 15 days past due. For 1988, a case is delinquent if a payment is more than 30 days past due. 4/ Amount delinquent includes past due principal and interest payments.

Source: Farmers Home Administration, 616 report, various issues.

Table 17--Farmers Home Administration direct farmer loan program delinquencies by program, September 30, 1988

Direct farmer programs	Number of active cases 1/ (caseload)			Principal outstanding		
		Delinquent 2/			Delinquent 3/	
	Total	Total	Proportion	Total	Amount	Share of total
	---Number---		Percent	--Mil. dollars--		Percent
Farm ownership (FO)	113,698	27,869	24.5	7,255.9	609.2	8.4
Farm ownership -- nonfarm enterprises	1,141	310	27.2	45.9	5.6	12.2
Operating loans -- excluding youth (OL)	108,163	41,476	38.3	5,694.8	1,439.7	25.3
Operating loans -- youth	920	395	42.9	3.5	2.1	60.0
Emergency disaster (EM)	97,634	43,080	44.1	8,413.5	4,801.6	57.1
Economic emergency (EE)	41,286	20,481	49.6	3,376.3	1,408.6	41.7
Recreation	160	48	30.0	10.5	2.0	19.0
Soil and water	13,712	4,108	30.5	264.3	52.6	19.9
Economic opportunity	214	191	89.3	0.3	0.3	100.0
Total	376,388	137,958	36.7	25,065.0	8,321.7	33.2

1/ Duplicated cases because some borrowers have loans under several different programs. 2/ A case is considered deliquent when a payment is more than 30 days past due. 3/ Amount delinquent includes past due principal and interest payments.

Source: Farmers Home Administration, 616 report for September 30, 1988.

Delinquencies reported by lenders using the loan guarantee programs remain low, despite increased use. Outstanding principal guaranteed by FmHA grew 33 percent to $3.2 billion at the end of fiscal 1988, but the share of delinquent loans remained below 2 percent (table 18). As with the direct loans, the guaranteed emergency programs have a higher proportion of delinquencies (table 19). No longer receiving funding, loan volume under these programs is rapidly falling.

FmHA did not initiate foreclosure efforts in 1988. This was primarily the result of delays in implementing regulations for the Agricultural Credit Act of 1987, which spells out how FmHA is to handle delinquent loans. However, during fiscal 1988 FmHA reported that 3,159, or 1.3 percent, of its borrowers left farming due to financial difficulties.

Use of special loan servicing activities to assist financially stressed borrowers declined again in 1988. Borrowers having their loans rescheduled, reamortized, or consolidated totaled 15,266. This compares with 120,098, 43,034, and 31,809 in fiscal years 1985, 1986, and 1987, respectively.

Other loan servicing activities, such as the subordination of collateral to other lenders so they could continue or extend financing, continued to be used extensively.

The Interest Rate Buydown Program continued to be used sparingly during 1988. Only $16.5 million was obligated, down from $22.9 million in fiscal 1987. The program enables lenders to continue to provide credit to family farmers who are unable to project a positive cash flow without reducing interest rates. Under the program, FmHA will make payments to lenders of not more than 50 percent of the cost of the interest rate reduction up to a maximum total interest rate write-down of 4 percentage points. New regulations for 1989 requiring guarantee lenders to consider the program before collecting on a guarantee could spur greater use.

Life Insurance Companies

During 1988, the agricultural mortgage portfolios of the life insurance companies improved, but the level of financial stress remains high in terms of earlier norms. Historically,

Table 18--Farmers Home Administration guaranteed farmer loan program delinquencies, September 30, 1982, to September 30, 1988

Date 1/	Number of active loans			Principal outstanding		
		Delinquent			Delinquent 2/	
	Total	Total	Proportion	Total	Amount	Share of total
	--- Number ---		Pct.	-- Mil. dollars --		Pct.
1982	4,067	180	4.4	405.0	12.6	3.1
1983	3,467	186	5.4	355.5	14.6	4.1
1984	4,111	235	5.7	484.2	16.2	3.3
1985	7,160	313	4.4	834.5	19.3	2.3
1986	15,137	723	4.8	1,664.5	31.4	1.9
1987	23,558	1,106	4.7	2,384.0	42.6	1.8
1988	35,746	1,388	3.9	3,177.6	54.1	1.7

1/ September 30 of year shown. 2/ Amount deliquent includes past payments of principal and accrued interest.

Source: Farmers Home Administration, 4067 report, various issues.

Table 19--Farmers Home Administration guaranteed farmer loan program delinquencies by program, September 30, 1988

Guaranteed farmer programs 1/	Number of loans			Principal outstanding		
		Delinquent			Delinquent 2/	
	Total	Total	Proportion	Total	Amount	Share of total
	---Number---		Percent	--Mil. dollars--		Percent
Farm ownership	4,360	236	5.4	610.8	10.9	1.8
Operating loans	30,282	890	2.9	2,432.7	26.6	1.1
Emergency loans	25	1	4.0	0.6	0.2	41.3
Economic emergency	1,003	231	23.0	123.6	13.2	10.7
Emergency livestock	76	30	39.5	9.9	3.2	32.1
Total	35,746	1,388	3.9	3,177.6	54.1	1.7

1/ Emergency, Economic Emergency, and Emergency Livestock guaranteed loan programs are currently not being funded. 2/ Amount delinquent includes past due payments of principal and accrued interest.

Source: Farmers Home Administration, Report 4067 for September 30, 1988.

agricultural real estate mortgages have been an important life insurance company investment and a key source of real estate loan funds. Approximately 43,000 agricultural mortgage loans were held by about 15 life insurance companies on June 30, 1988, down from 20 in 1980.

Delinquency rates based on the number of loans held by life insurance companies were lower for agricultural mortgage loans than for nonagricultural loans throughout the 1970's. The agricultural delinquency rate first exceeded the nonagricultural rate in June 1981, and it has done so continuously since June 1982 (table 20). The June 1987 agricultural mortgage delinquency value of 8.30 percent was the highest recorded since the American Council of Life Insurance initiated its survey in 1954; it has declined to 6.75 percent, still far in excess of the rate on nonagricultural mortgages.

The delinquency rates on the volume of loans outstanding are proportionately higher for agricultural mortgages because these loans are larger on average. The percent of agricultural mortgage debt that is delinquent has exceeded the nonagricultural rate continuously since June 1978. The share rose to a record 19.85 percent in June 1986, but declined to 13.27 percent by June 1988 (table 20). The nonagricultural mortgage delinquency rate was 2.77 percent in June 1988. Some $1.2 billion of life insurance company agricultural mortgage loans were delinquent on June 30, 1988.

Agricultural mortgage foreclosure rates by number of loans have exceeded nonagricultural rates since June 1979, and stood at 3.36 percent in June 1988 (table 21). The June 1988 rate was down from the record high of 3.91 percent recorded a year earlier. A total of 1,458 life insurance company agricultural mortgage loans were in the process of foreclosure on June 30, 1988, down from the 1,917 of June 30, 1986.

Agricultural mortgage foreclosure rates by amount of loans outstanding have exceeded nonagricultural rates since June 1978 and have reached record levels in the 1980's (table 21). On June 30, 1986, a record 8.23 percent of the amount of agricultural loans outstanding were in the process of foreclosure, but by June 30, 1988, the rate had declined to 6.33 percent. A total of $573.0 million in life insurance company farm mortgage loans were in the process of foreclosure on June 30, 1988, down from the $780.2 million of a year earlier.

The number and dollar amount of agricultural and nonagricultural loans actually foreclosed during 1980-88 are shown in table 22. Agricultural mortgage foreclosures rose each year of the 1980's until 1986 when they peaked at $827.5 million. During the 1982-85 period, the dollar amount of agricultural mortgage foreclosures even exceeded that for nonagricultural mortgages. Completed agricultural foreclosures declined to $691.9 million in 1987, and to $185.8 million for the first half of 1988. The first half of 1988 figure compares with the $342.7 million figure recorded during the first half of 1987. Life insurance company agricultural loan foreclosures during the 1980's through June 30, 1988, totaled $3.12 billion, with 48.8 percent of this amount occurring during 1986-87.

Table 20--Life insurance company mortgage loan delinquencies, 1980-88 1/

End of month	Rates by number of loans		Rates by amount	
	Nonagricultural mortgages	Agricultural mortgages	Nonagricultural mortgages	Agricultural mortgages
	Percent			
1980 June	.95	.79	.79	2.82
Dec.	1.06	.54	.89	2.00
1981 June	.89	1.02	.73	4.04
Dec.	1.11	.77	.69	3.69
1982 June	1.03	1.70	.87	6.45
Dec.	1.07	1.66	.83	6.40
1983 June	1.04	2.99	1.04	9.82
Dec.	1.10	2.63	.90	8.27
1984 June	1.17	3.88	.93	10.38
Dec.	1.24	3.78	.90	9.58
1985 June	1.15	6.26	1.02	14.89
Dec.	1.43	6.34	1.16	15.06
1986 June	1.33	9.08	1.91	19.85
Dec.	1.64	8.30	2.65	17.01
1987 June	1.46	9.12	2.96	18.01
Dec.	1.60	6.83	2.61	14.31
1988 June	1.53	6.75	2.77	13.27

1/ Delinquent loans (including loans in the process of foreclosure). A delinquent loan is a nonfarm mortgage with interest payments in arrears at least 2 months (60 days if other than a monthly pay) or a farm loan with interest in arrears more than 90 days. Reporting companies account for approximately 80 to 85 percent of the mortgages held by U.S. life insurance companies depending on the date of the survey.

Source: American Council of Life Insurance, Investment Bulletin, various issues.

Table 21--Life insurance company mortgage loans in the process of foreclosure, 1980-88 1/

End of month	Rates by number of loans		Rates by amount	
	Nonagricultural mortgages	Agricultural mortgages	Nonagricultural mortgages	Agricultural mortgages
	Percent			
1980 June	.08	.13	.18	.57
Dec.	.09	.17	.17	.72
1981 June	.11	.25	.15	1.18
Dec.	.12	.28	.23	1.20
1982 June	.12	.37	.24	1.63
Dec.	.16	.63	.29	2.41
1983 June	.18	.87	.29	2.60
Dec.	.16	.89	.31	2.60
1984 June	.16	1.14	.30	2.97
Dec.	.16	1.75	.18	4.54
1985 June	.17	2.16	.28	6.00
Dec.	.21	2.86	.31	7.11
1986 June	.25	3.42	.69	8.23
Dec.	.29	3.84	.84	7.83
1987 June	.37	3.91	1.11	7.98
Dec.	.41	3.02	1.07	6.43
1988 June	.46	3.36	1.16	6.33

1/ Reporting companies account for approximately 80 percent of the mortgages held by U.S. life insurance companies depending on the date of the survey. Loans in foreclosure include those on which foreclosure action has been authorized, including any involved in a subsequent filing of bankruptcy. Beginning in 1988, the loans in foreclosure category includes loans in redemption period.

Source: American Council of Life Insurance, Investment Bulletin, various issues.

Table 22--Life insurance company mortgage loans foreclosed, 1980-88 1/

Year	Nonagricultural mortgages		Agricultural mortgages	
	Number	Thou. Dollars	Number	Thou. dollars
1980	549	63,237	26	18,160
1981	552	58,491	47	55,741
1982	760	131,392	167	170,310
1983	868	114,993	306	347,002
1984	1,024	242,428	475	289,251
1985	1,033	328,558	1,000	530,235
1986	1,541	1,143,082	1,654	827,472
1987	2,048	1,580,027	1,515	691,914
1988 2/	602	1,158,088	385	185,753

1/ Loans foreclosed include those for which title to the property or entitling certificate was acquired during the period shown, either through foreclosure or voluntary conveyance in lieu of foreclosure. Dollar amounts include principal outstanding at the time of the foreclosure, amounts capitalized for interest, foreclosure costs and any advances made to protect the collateral. 2/ January 1 through June 30. Data for 1988 are not strictly comparable with earlier years because of changes in the survey sample. Beginning in 1988 loans in redemption are classified as loans in process of foreclosure; in earlier years these loans were reported as loans foreclosed. For this reason there may be some double counting of foreclosed loans, particularly agricultural properties, in 1988.

Source: American Council of Life Insurance, Investment Bulletin, various issues.

Recent Credit Policy Developments

Farm lenders in recent years have developed numerous special credit policies to cope with borrowers' financial stress. In addition, a number of Federal and State policies and programs have been developed to alleviate farmer financial stress. Whether initiated by the public or private sector, or directed at one type of farm lending institution or special category of financially troubled farmers, the impacts of special policies and programs typically are distributed among the various types of lenders. This results from the many competitive and cooperative linkages among lenders.

The efforts of the public sector have assisted both farm lenders and farmers. Assistance activities include interest rate buy-downs, interest deferrals, low interest loans, loan guarantees, tax-exempt financing, secondary markets with linked deposits, secondary mortgage markets, foreclosure review, mediation, and moratoria. Adjustments also have been made in banking regulations, tax codes, homestead exemptions, and bankruptcy law. Available programs include referral hotlines, financial, legal, and stress counseling, job search and retraining assistance, and farm management training. Public policies have an affect farm and lender survival rates, the ease with which displaced farmers build new lives, the economic health of rural areas, and the future competitiveness of each State's farm sector.

The net effects are difficult to assess given the number and complexity of policy initiatives and the recent pace of change. The following section identifies recent major farm credit policy changes.

Commercial Banks

Farm borrowers were helped through their banks as the banks relied more on several programs set up during the farm financial crisis. More banks benefited from: the bank regulators' forbearance program, regulator-encouraged loan renegotiation for stressed borrowers, loan-loss amortization for farm banks in farm-dependent counties, and seasonal borrowing from the Federal Reserve to meet the needs of local customers. The FDIC increased its use of special techniques to resolve bank insolvencies that minimize the effects of bank failures on local communities and farm borrowers.

Yet other programs tied to the farm financial crisis were phased out. The FRB did not renew the temporary simplified loan program for the 1988 planting season. And FmHA's program of sending emergency credit teams into failing banks to issue guarantees for troubled farm borrowers, after falling into disuse in 1987 and 1988, was terminated on January 1, 1989.

The capital forbearance program is the mainstay of Federal bank regulators' efforts to assist banks experiencing heavy losses due to adverse developments in various sectors and regions of the economy. Forbearance was set up especially for banks lending to businesses in the farm and energy sectors and in the Southwest. Commercial banks admitted to the program are allowed to operate with substandard capital levels provided they have an acceptable long-term plan to replenish their capital. The program was initiated in 1986 and liberalized in 1987.

Banks with substandard primary capital-asset ratios as well as banks with adequate capital ratios but substantial impending losses may apply to the forbearance program. Initially, the program was limited to farm and energy banks, but since 1987 any weakened bank may apply. Banks may apply for the program through their primary Federal bank regulator until December 31, 1989. The program is scheduled to expire on January 1, 1995, giving banks in the forbearance program a minimum of 5 years to rebuild their capital.

Applications for the capital forbearance program have increased steadily since the program began. By September 1988, 490 banks had applied: 273 had been admitted, 114 rejected, and 96 either withdrew their applications or exited the program. Based on preliminary data, it appears that most of those exiting the program were failing rather than graduating.

Yet the bulk of severely stressed banks are not in the forbearance program. As of mid-1988, 500 banks reported primary capital less than 5.5 percent of assets, and 93 more reported above-standard capital ratios but nonperforming loans exceeding total capital. Agricultural banks account for about 22 percent of the banks reporting substandard capital and about 18 percent of the banks with above-standard capital ratios but with nonperformings greater than capital.

Another program initiated by Federal bank regulators encourages banks to renegotiate problem loans on terms more favorable to troubled borrowers. Bank accounting practices were changed whereby the terms of a loan may be extended, and interest and principal payments reduced, provided that the entire original principal is reasonably expected to be repaid. The bank loses future interest income as a result of the renegotiation, but no charge against capital is necessary. In many cases, this new accounting practice can be combined with FmHA's interest-rate buydown program, enhancing the benefits of renegotiation to both the banks and their farm borrowers.

Renegotiated loans, reported as nonperforming prior to June 30, 1986, are now reported as renegotiated and performing according to modified terms. The reporting change reinforces the incentive for bankers to work with their troubled bor-

rowers. By renegotiating, banks can often lower their reported nonperforming loans.

Agricultural banks have responded more favorably to this initiative than other banks. As of June 1988, approximately $2.9 billion in loans at all banks had been reported as renegotiated and performing, virtually unchanged from a year earlier. Yet agricultural banks increased their share of these renegotiated loans to $750 million, up about $75 million from mid-1987. Renegotiated loans accounted for 1.0 percent of loans at agricultural banks as of mid-1988, compared to 0.3 percent at small nonagricultural banks.

The Competitive Equality Banking Act of 1987 included a provision allowing small agricultural banks to stretch out their recognition of farm loan losses. Small (less than $100 million in assets) agricultural banks (using the 25 percent definition) in farm-dependent areas can spread out their farm loan losses over 7 years instead of taking them the year they are incurred. Banks wishing to use this new provision must apply to their primary Federal regulator for approval. Banks applying must show that their losses stem from problems in the farm sector, not bad management or insider abuse.

The fourth quarter of 1987 was the first time banks could defer losses under the new statute. At that time, eight banks reported deferring $17 million in farm loan losses. Through mid-1988, 35 banks reported deferring $40 million in such losses. While small, these losses would have substantially increased agricultural loan charge-offs during the first half of the year.

Other programs assist agricultural banks under pressure. To ensure adequate liquidity at banks experiencing strong seasonal loan demands, the FRB has a seasonal lending program where banks needing funds on a seasonal basis may borrow from the local District Federal Reserve Bank at discount window rates. To enhance the usefulness of this program for small and medium-sized banks, especially those that are agricultural, the FRB in 1986 increased the proportion of the seasonal loan demand surge that may be covered. The program is not, however, limited to agricultural banks or banks with farm loans outstanding.

Total seasonal borrowing set an all-time peak at $460 million in the week of August 24, 1988, about $153 million over the 1987 peak. The number of banks borrowing peaked at 327 during the week of August 31, up by 68 banks from 1987. Several factors could explain the increase. A wider spread between the discount rate and other interest rates made the seasonal borrowing facility more attractive to banks. Also, rising agricultural loan demands tied to the recovering farm sector, illustrated by higher loan-deposit ratios at many agricultural banks, probably played a role. Some of the increase in the demand for funds was tied to the drought.

Beginning in 1986, the FDIC began using policies designed to limit the credit-market interruptions associated with bank insolvencies. The FDIC increased its use of "open bank assistance" to help banks nearing insolvency avoid closure. Essentially, the FDIC removes a portion of the bank's bad assets (i.e., nonperforming loans) in exchange for a cash injection. But to do this, the FDIC usually requires a change in the bank's management, a wipe-out of current stockholders' equity, and an infusion of additional private capital. In 1988, 22 banking corporations received open bank assistance, up from 19 in 1987. In 1988, only 23 percent of the banks getting such assistance were agricultural, down from nearly half in 1986.

The second policy designed by the FDIC to mitigate the problems and costs associated with bank insolvencies is increased use of the "whole bank" method of closing banks. Before, the FDIC auctioned a closed bank to the highest acceptable bidder after replacing the bad loans with cash, and collected a premium for the quality assets. Such a premium represents the value of the closed bank's charter. But in depressed farm and rural communities, no bidders may be interested at any premium. The "whole bank" method provides the acquiring bank funds up front to cover the entire failed bank's loan portfolio, including the bad loans.

Using the "whole bank" method increases the number of bidders for failing banks. So banks that would have disappeared before are now acquired by other banks, and banking services in small rural communities are maintained. Moreover, because the acquiring bank keeps all the bad loans, the bank can work with the local stressed borrowers; before the bad loans often resulted in foreclosures. In 1988, 56 bank failures were resolved with the "whole bank" method, up from 19 in 1987.

Farm Credit System

Policy developments affecting the FCS focused on cost-cutting mergers, an FLB closure, and actions to improve the FCS's long-term viability. During 1988, several provisions of the Agricultural Credit Act of 1987 were implemented. The actions taken have fundamentally changed the institutional structure of the FCS. To cut overhead expenses, mergers took place. The FCA declared the Jackson FLB insolvent and closed it in May of 1988. Also, as directed by the 1987 Act, the FCA established a higher capital-asset ratio.

The organizational structures of the Banks for Cooperatives has changed for the first time in their 55-year history. The 1987 Act required the 12 district BC's and the Central Bank for Cooperatives to vote on a merger. On June 30, 1988, stockholders of each of the BC's voted on whether their BC should merge with other BC's into one, nationwide consolidated bank. An initial vote yielded eight for merger and four against. A second vote in two of the dissenting districts

brought reversals, so that ultimately the only two BC's that remained separate were those of the St. Paul and Springfield districts. The new consolidated BC began operation on January 1, 1989. Both it and the two district BC's that voted not to merge have the authority to make loans anywhere in the country.

The Agricultural Credit Act of 1987 required FLB's and FICB's of each district to merge, and in early July they did so. In 11 of the 12 FCS districts, the FLB that existed since 1917 and the FICB added in 1933 were merged into single district Farm Credit Banks (FCB's). In the 12th district, Jackson, Miss., the FLB is in receivership and unable to participate.

The merger between FLB's and FICB's consisted primarily of reconstituting the boards of directors. Each new board consists of all members of both old boards, plus two members from each group representing local associations and one district member elected at large. Only in Texas and Wichita has top management changed. Estimations of savings associated with the mergers are between 10 and 20 percent of overhead costs.

During 1989, proposals for mergers between FCB's and associations of different districts will also be voted on by stockholders. Potential plans for district mergers include several two- and three- district combinations.

In addition to mergers between financial institutions, some re-organization and consolidation of System-wide administrative organizations will take place. The Farm Credit Council of America (FCCA) in Denver, the Federal Farm Credit Banks Funding Corporation in New York, and the central Farm Credit Council (FCC) based in Washington, DC, are expected to reorganize and consolidate over the next few years. One possibility is a merger of the FCCA and the FCC, excluding the FCCA regulatory functions which would be transferred to the Funding Corporation.

System institutions have continued to use alternative accounting methods originally provided for in 1986 legislation, in order to delay recognition of some expenses that would impair borrower stock. Through September 1988, two FCB's and one PCA used regulatory accounting practices (RAP). RAP allowed recognition of $228 million worth of loan loss provisions and interest expenses to be postponed. Though RAP may be used until the end of 1992, many previous uses are no longer applicable.

By regulation, RAP can no longer be used in determining the value of capital stock and other equities for retirement purposes. All borrower stock issued before October 5, 1988, is "protected"; required to be retired at par value as the loan principal is repaid. All equities issued after October 5 qualify as permanent capital but are not protected. Non-protected stock cannot be retired at more than book value according to Generally Accepted Accounting Principles.

The 1987 Act has also spawned new regulations aimed at increasing and stabilizing the capital of System institutions. New regulations require a minimum permanent capital of 7 percent of risk-adjusted assets and off-balance sheet commitments by 1993 and plans to achieve those objectives. If institutions fail to achieve the target capitalization, they may avoid FCA enforcement action, but will be prohibited from retiring stock or issuing dividends to shareholders.

According to an FCS official, if capital were built up to 7 percent by the sale of stock, loan interest rates would be boosted an average of 1 percent. If the target level were achieved by increasing retained earnings, loan interest rates would rise by 3 percent. Spokespersons for competing organizations maintain that the System has historically been undercapitalized, hence operated with an unfair advantage.

Perhaps the most significant agricultural finance policy development of 1988 was the initiation of the Federal Agricultural Mortgage Corporation (Farmer Mac). Though Farmer Mac will be regulated by the same organization as the FCS banks and associations, System lending institutions will have little control over its operation. Establishment of loan standards, operating procedure, and corporate organization will be determined by a 15-member permanent board. Board member positions are divided equally among presidential appointees, commercial lenders, and FCS officials. Of the commercial lender slots, two are filled by insurance company representatives, two by banking associations (American Bankers Association and Independent Bankers Association), and one from a larger bank.

In the past year, the Farm Credit System has stabilized a number of adverse trends in its financial condition. By using financial assistance loan provided for in the 1987 Agricultural Credit Act, the FCS has cut its nonearning assets and funding costs. As a result, the FCS is able to offer lower interest rates to borrowers and stabilize its loan volume.

Farmers Home Administration

On November 14, 1988, FmHA began mailing notices to nearly 71,000 borrowers having loan payments at least 180 days in arrears. Borrowers were notified of their delinquent status, their FmHA rights, and the servicing programs available to resolve their delinquent loans. Failure to respond within 45 days gave FmHA the right to initiate collection through legal actions.

The notices were the culmination of a massive rewriting of FmHA's farmer program regulations to reflect policy changes of the Agricultural Credit Act of 1987, which became law on January 6, 1988. For FmHA, most new credit policy developments during 1988 surrounded the issuance of these

new regulations. Many important activities, such as the sale or lease of acquired property, were curtailed or suspended during the year awaiting the new regulations.

Most noteworthy among the new regulations are those concerned with the 1987 Act's new borrower rights rules designed to remove some $12 billion in FmHA loans from delinquent status. The Act spells out that FmHA must resolve delinquent loans as they occur by offering to restructure them through a series of servicing programs.

The new regulations satisfy a U.S. District Court ruling that had blocked FmHA from initiating foreclosures since May 1987. FmHA must now give farmers clear, complete, and timely information on the status of loans, servicing programs, legal actions that might be used against them, their rights to appeal, and other rights available to them.

In the new regulations, FmHA has organized the loan servicing programs outlined by the 1987 Act into a five-phase policy. Every FmHA farmer program borrower is now placed in one of the five phases, regardless of whether he or she has a delinquent loan. Each phase has servicing programs to assist borrowers. Phases I, II, and III provide primary loan servicing programs, while Phases IV and V concentrate on loan preservation. The objective for every phase is to keep farmers on the farm at the lowest cost to the Government.

Borrowers having a Phase I status are current on their payments and pay regular interest rates and regular terms. FmHA's objective is to graduate these borrowers to private sector creditors. All borrowers will now have their loans reviewed at least annually to identify repayment shortfalls before payments become past due.

If a borrower is unable to keep payments current for reasons beyond his or her control, FmHA will reamortize or reschedule to keep payments at regular rates and terms. Rescheduling can be as long as 15 years for operating loans and reamortization can be as long as 40 years for real estate loans. If this is not sufficient to make up repayment shortfalls, then the borrower is eligible for Phase II.

Under Phase II, FmHA may lower interest rates on loans acted upon in Phase I. Borrowers become eligible for limited resource rates which are generally 3 percentage points below the regular interest rate. If this is still insufficient, FmHA will defer principal and interest payments for up to 5 years. Phase I and II servicing programs have been used extensively in the past by FmHA. If these programs fail to keep borrowers from falling 180 days behind in their payments, they move to Phase III.

Here, FmHA must notify the borrowers that their loans are 180 days delinquent, of their rights, and the servicing programs available to them (this is the notice that FmHA began sending on November 14, 1988). In this phase, FmHA will restructure the debt through principal and interest write-downs, providing the present value of the restructuring is greater than the Government's net recovery under involuntary liquidation and other creditors agree to necessary debt restructuring. If a write-down fails to yield a feasible debt repayment plan, the borrower enters Phase IV and is sent a notice of FmHA's intent to accelerate the loan (begin foreclosure).

Under Phase IV, the borrower may pay off the loan with cash at the Government's net recovery value of the collateral. If the borrower fails to do so, he or she can voluntarily convey the collateral to FmHA in exchange for a discharge of debt. The borrower is then considered for the loan service preservation programs, which allow lease back of the property with an option to buy at a later date. If the property contains the borrower's residence, there are homestead protection rules that allow the buildings and surrounding 10 acres to be leased or bought from FmHA.

If the borrower does not voluntarily convey the property to FmHA, then foreclosure proceeds. If FmHA takes the property, the borrower is moved to Phase V and once again given the opportunity to lease the property with an option to buy, or exercise homestead protection rights. Spouse and children are eligible for lease and buy-back options in this phase.

To hasten the loan servicing process, most decisions by FmHA and the borrower are made under strict deadlines. If a borrower is unsatisfied with a loan servicing decision, he or she has strong appeal rights. All appeal hearings are tape recorded and are handled by a new national appeals staff. Likely to be contested are values placed on collateral used to determine net recovery values under debt restructuring. If a borrower disagrees with a value, he or she can request an independent reappraisal.

The new loan servicing policy clearly directs FmHA to try and keep every farmer on the farm. This policy has implications for FmHA as a credit source. Since delinquent borrowers may not be severely penalized, there is not much incentive for farmers to make timely loan payments or sound business management decisions. Because of lenient loan terms and rights, borrowers have a strong incentive to stay with FmHA rather than move to private lenders. There are no provisions to counteract any of this situation. Yet, the extensive new servicing procedure does reemphasize the concept of supervised credit. This concept was often lost as FmHA grew rapidly during the 1970s.

FmHA's new policy objective to keep every farmer on the farm is reminiscent of those of its predecessor agencies, the Resettlement Administration and the Farm Security Administration. These Depression-era social welfare agencies

provided grants and loans to help families remain on their farms or reestablish themselves in self-supporting agriculture. Since FmHA's creation in 1946, its mission has been to serve only as a temporary source of supervised credit until private sector credit can be obtained.

Other regulations were rewritten. Regulations for the guaranteed lending programs were extensively rewritten to reflect changes required by the Agricultural Credit Act of 1987. New regulations also clarify eligibility rules and streamline the processing and servicing of FmHA guarantees.

Features of the guarantee programs attractive to borrowers and lenders were added. For example, lenders may restructure loans through write-downs and collect loss payments from FmHA. In the past, the lender had to foreclose in order to collect on FmHA's guarantee. In addition, guarantee lenders must now participate in State mediation programs and try to assist borrowers by using the Interest Rate Buydown program.

Some little used or no longer funded programs, such as the Debt Adjustment Program (DAP), were eliminated. Under the DAP program, FmHA gave commercial lenders a 90-percent loan guarantee in exchange for writing down principal or interest enough to allow the borrower to show a positive cash flow. Fewer than 20 farmers and lenders participated in the DAP program during the past year.

Some regulations were not released or finalized during the year. For example, regulations for the new FmHA sponsored secondary market for guaranteed loans were not issued.

Life Insurance Companies

In 1988, life insurance companies used a variety of policies to deal with problem farm loans: capitalization of interest; deferral of interest and principal; deeds in lieu of foreclosure on a portion of the security; sale of mortgage to a secondary lender; modification of the interest rate and loan maturity in exchange for an arrangement to participate in the operating profits and profits upon sale; and released acreage from security.

They also have used a variety of approaches to address borrowers' rights, Chapter 12, State loan mediation programs, and related activities. Some companies have felt that these new programs place the lender at a severe disadvantage and are time consuming and expensive. While some insurance companies have pulled back because of these policies, most have adapted, although they report delays in resolving delinquencies and have higher costs.

They report that borrowers' rights and lender liability suits were a major concern in 1988, requiring constant attention. Chapter 12 did not have the impact that was initially expected on either the loan portfolio or underwriting procedures. State mediation programs are viewed as quite unproductive. These programs will become a diminishing factor as the agricultural economy recovers, but some companies report that States using the mediation process are much less desirable places to make agricultural mortgage loans. Some companies report that these programs only slowed the inevitable course of events. However, in other instances, the State mediation programs have speeded up the timetable in handling a difficult delinquent borrower.

Another area presenting many challenges is acquired farm property. Life insurance company holdings totaled 4.1 million acres valued at $1.5 billion on June 30, 1988. Life insurance companies have tended to hold on to foreclosed property longer than the other institutional lenders. The life insurance industry, due to the small dollar value of farm loans compared with total assets and their tightly regulated and aggressive internal management, was quick to recognize problem farm loans and foreclose when loan problems began to occur in the 1980's--so the land inventory grew quickly. Moreover, the life insurance companies could afford a more wait and see attitude toward future farmland price trends than could the FCS, where farmland is the primary asset. In 1988, the strengthening farmland market afforded the life insurance companies the opportunity to sell larger amounts of acquired property at improved terms. Some companies were much more aggressive in selling than others. Farm property held by the insurance industry began to trend down during the year.

Life insurance companies took different approaches toward new agricultural loans. In 1988, some companies were aggressively seeking new loans while others, stung by earlier problems, were out of the market. Some companies offered funds only for renewals or increases of existing good loans. Those companies active in the market reported more funds available than there were qualified agricultural borrowers. Potential borrowers had become more cautious and competition among lenders was keen for quality, new mortgage loans.

The policies of the life insurance companies toward the new Farmer Mac established under the Agricultural Credit Act of 1987 are varied. Several companies were very active in developing this legislation and worked hard in 1988 toward the eventual establishment of the market. Other companies with agricultural mortgage portfolios have taken a cautious attitude. Opinions vary on the future potential of Farmer Mac and the earnings that might be garnered by participation in the secondary market.

Current Agricultural Lender Outlook

The outlook for farm lenders in 1989 is quite favorable. Except in areas heavily hit by the 1988 drought, delinquencies should continue to decline. Commodity prices are expected to provide strength, net farm income will be higher and farm

cashflows substantial, overall farm financial stress will be less, returns to farm equity will be positive for the third year in a row, land prices are expected to increase 2 to 4 percent, and farm debt will expand slightly. These positive developments, plus substantial levels of Government payments, will afford lenders a continuing opportunity to restructure farm loans and liquidate acquired property. The agricultural finance industry will support stricter underwriting standards and further development of new tools such as the secondary mortgage market.

Commercial Banks

Agricultural banks will continue improving in 1989. Farm loan delinquency rates at all banks and total loan delinquency rates at agricultural banks are expected to continue falling, perhaps back to rates seen in the late 1970's. And agricultural bank rates of return are expected to continue rising.

Commercial banks, especially agricultural banks, are well positioned to meet the materializing increase in demand for farm credit. While loan- deposit ratios at agricultural banks are beginning to rise, the ratios are still near historic lows and below what the bankers say they desire. With loan demand rising, agricultural banks will have an easier time expanding their market share, after aggressively expanding their share as loan demand fell.

Banks' aggressive farm lending and desire to keep a short-term portfolio suggest they will probably be major users of the new secondary market in farm mortgages, Farmer Mac. The new market will allow lenders to originate and service fixed-rate, long-term farmland mortgages without keeping the loan on their books. By selling the mortgages, the banks will pass on the associated interest-rate risk while earning the origination and servicing fees.

The improving farm economy will limit agricultural bank failures in 1989. Between 21 and 43 agricultural banks are forecast to fail by ERS in 1989. Total bank failures are forecast by ERS to be sharply down in 1989. Depending on the timing of the open bank assistance deals for several Texas-based banking corporations, total failures are forecast to be in the 94-to-136 range, after breaking 200 during each of the past 2 years. The forecasts assume no recession, stabilizing to improving oil prices, and a strong net farm income. Most of the banks failing in 1989 -- both agricultural and non-agricultural -- will be in the 5-State energy belt. However, a few agricultural banks, sprinkled through the areas hit hardest by the drought in some North Central and Mountain States, will fail.

Farm Credit System

Whether the System keeps improving depends on a number of factors, not the least of which is the strength of the farm sector itself. If the 1988 drought has as little effect on 1989 farm income as is currently predicted, the FCS may be only slightly affected by the worst weather in 50 years. Nonetheless, diversification of the loan portfolio to avoid reoccurrence of the events of 1985 will remain a priority for the FCS. The FCS lobbied Congress to expand the types of loans FCS institutions could make, without substantial impact. The FCS will increase the diversification of loans within the spectrum of farm, farm-related, rural housing, and rural utilities currently permitted, as well as geographically diversifying through mergers.

Repayment of financial assistance will not be an item on the 1989 budget sheet. Unusual expenses that may occur in 1989, such as some costs of the Jackson FLB liquidation, more buy-down of noncallable debt, further postponed recognition of operating costs as allowed by RAP, can all increase assistance need, and, therefore, the amount that must be repaid starting in 1993. Subscription to the FCS insurance fund will not become an expense until 1990.

In the meantime, over vigorous opposition, System institutions have been required by the FCA to begin increasing their capital-asset ratios to the 7 percent mark, decreasing liquidity in the short-run. How much of a strain this will be for the institutions is not clear since the FCA has promised to forbear on institutions that cannot meet the new standard, provided they are well managed and show a reasonable plan to meet the standard in the future. Short-term costs of organizational changes will also occur, boosting expenses.

By the third quarter of 1989, Farmer Mac is expected to begin operation. The FCS plans to make full use of its services. How Farmer Mac will alter the playing field is still not clear, particularly given hesitation on the part of farmers to assume more debt. For the FCS, this is a signal for reinvigorated marketing of loans. FCS officials testified in 1988 before Congress their commitment to regain market share that has been steadily eroding over the past 4 years.

The FCS will likely be at least as successful in 1989 as it was in 1988. In large part, this is because the System will still be in the recuperation phase of the assistance program legislated in 1987. The real questions about the viability of the System as a revamped organization will not be answerable until postponed costs become due and Farmer Mac gets on its feet.

Farmers Home Administration

FmHA's new five-phase loan servicing policy will have a major effect on its borrowers in 1989 and beyond. Estimating the effect is difficult because each delinquent loan is handled on a case by case basis. However, FmHA did release estimates of the impact of the new policy on its borrowers as part of a required regulatory impact report. FmHA estimated that of 242,000 borrowers in early 1988, 85,000

had delinquent loans and 33,000 were in some other state of default. Of these 118,000 borrowers, 37,000 (31 percent) could solve their delinquency with loan servicing programs available in Phases I and II.

The remaining 81,000 were considered candidates for Phase III. FmHA estimates show that only 16,000 (14 percent of the 118,000 borrowers) borrowers would be eligible for debt write-downs under Phase III. The others were considered ineligible since 54,000 could not show debt repayment ability after a write-down and since 11,000 had debts that were less than the Government's net recovery value. Therefore, of the 118,000 borrowers, FmHA estimates show that 53,000 or 45 percent would benefit from servicing programs available under Phases I, II, and III. The remaining 65,000 could only be assisted through the preservation loan servicing programs found in Phases IV and V.

FmHA's regulatory impact report also estimates that it will lose $2.7 billion on loans receiving write-downs and $6.7 billion for borrowers receiving other servicing options. Because of the complexity and time required to resolve all the delinquent borrower cases, these losses will likely be reflected over the next couple of years. It is important to note that most of these losses would have been incurred regardless of the new policies. FmHA's problem loans have accumulated throughout the 1980's, and losses were inevitable.

Funding of farmer programs in fiscal 1989 remains essentially unchanged from the previous year. Again in 1989, demand for direct farm ownership and operating loans will likely exceed the amount budgeted. More crop acreage and higher production costs will increase demand for spring operating credit. As in the past, farmers not receiving direct FmHA loans will be assisted in finding credit through FmHA guaranteed loans. Actions taken on delinquent loans could also impact the demand for these direct loan programs.

The rewriting of loan guarantee program regulations in the past year will make their use by commercial lenders easier. These simpler rules when coupled with the addition of a new secondary market in 1989 should make the guarantee program more attractive to lenders. The weaker financial condition of some farmers brought on by the 1988 drought and projected increases in crop acres could increase their use as well. Use of loan guarantees had fallen in fiscal 1988 for the first time during the decade.

The 1988 drought will increase the demand for FmHA's Emergency Disaster Loan Program (EM) in fiscal 1989. But the $600 million budgeted for the program should be adequate for expected demand. In the first few months of the fiscal year, demand for the loans has been light. This reflects the financial safety net provided farmers under the Disaster Assistance Act of 1988, higher commodity prices, and farmers' new attitude toward holding less debt.

Life Insurance Companies

The 1989 financial outlook for the life insurance farm mortgage loan portfolio is better than it has been for several years. Life insurance companies have foreclosed on a relatively large amount of farm loans in recent years and have absorbed considerable losses in the process.

Loan delinquencies and defaults will continue to be much higher than in recent decades, but the trend will continue downward. Companies will continue to forbear, extend, or otherwise adjust the terms of problem loans, but in instances where reasonable projections do not allow for forbearance, they will proceed with foreclosure.

The many adjustments of the 1980's have led to smaller, but financially sounder farm loan portfolios. There will be increased opportunities in 1989 for life insurance companies to make profitable farm mortgage loans, but the competition will be keen for the better-quality loans. Insurance companies will view agricultural lending with significant caution.

The industry will continue disposing of acquired farm property in 1989 in the strengthening farmland market. The goal is to sell farms acquired through foreclosure at the appropriate time as dictated by costs incurred and potential benefits. Many acquired property sales to date have produced losses.

The development of the secondary market for farm mortgage loans should have some impact on the farm mortgage market in 1989. The life insurance companies will closely follow the secondary market development and will evaluate their options. Some companies will move toward playing a major role in the new secondary market.

FARM SECTOR FINANCIAL STRESS AND FARM LENDER ACQUIRED PROPERTY IN THE 1980's

by
Jerome M. Stam, Gregory R. Gajewski, and Steven R. Koenig[1]

Abstract: Agricultural lenders acquired large amounts of farmland in the 1980's primarily through foreclosure. The inventories presented managerial and disposal problems for lenders, and influence the farm real estate market. At the time of peak involvement, major institutional lenders held an estimated 9 million acres of farmland valued at $3.8 billion--an amount was equal to 24 percent of all farmland acres sold annually. The amount of lender-held property has been declining since 1987.

Keywords: Acquired property, credit, farmland, foreclosures, bankruptcy, land use.

Agricultural lenders experienced increased levels of loan losses and problem loans during the 1980's resulting in greatly reduced earnings. As the farm sector's financial difficulties continued, agricultural lenders acquired a growing amount of farmland via foreclosure, deed in lieu of foreclosure, and farmer bankruptcy. Lenders generally viewed their farmland holdings as troublesome assets, and other interested parties have held differing opinions concerning this growing stock of acquired assets. Questions arise about the size of these holding and their effects on the farmland market. Lenders are accused of mismanaging the acquired farmland and dumping it on an already weak land market. A key question is whether lender holdings of acquired property are large enough to depress farmland prices and values.

The major institutional lenders--the Farm Credit System (FCS), commercial banks, the Farmers Home Administration (FmHA), and the life insurance companies--together accounted for 77.9 percent of the $76.7 billion in real estate debt (excluding households) owed by the farm sector on December 31, 1988. The remaining 22.1 percent (or $17.0 billion) was held by "individuals and others." A major portion of this group are owners who sell their farms on contract or take a mortgage as part of the sale agreements for the farm. Unlike a mortgage, the seller in an installment land contract retains title to the property until the conditions specified in the contract are fulfilled. The default of the borrowers in this situation presents a different problem for the seller than does the mortgage arrangement.

Data and Methodology

Despite the fact that the financial difficulties of the farm sector were increasingly passed to the farm lenders during the 1980's, it was not until the middle of the decade that reliable data on lender acquired property became available. The genesis of the data series for the four institutional lender groups varies considerably.

Commercial Banks

Unlike other lender groups, banks do not report farmland holdings, but they do report the value of total land holdings. All banks insured by the Federal Deposit Insurance Corporation report the value of their real estate holdings in the Quarterly Statement of Income and Condition (Federal Reserve Board of Governors). Real estate is measured for this account by the lesser of book or market value, less depreciation.

When the property is acquired through foreclosure, book value is generally defined as the original loan amount. The other real estate owned account in this report excludes property currently used to conduct the bank's business, but includes more than foreclosures. The net holdings of all property figures are converted into estimates of farmland holdings thus scaling down each bank's net holdings to reflect its involvement in agriculture (Stam, et al.).

This was done for each bank by multiplying the farm loans secured by real estate to total real-estate-secured loans ratio by net real estate held. That is, farmland holdings are assumed to be proportional to the bank's current activity in real-estate-backed farm loans relative to all its lending activity that could potentially result in increased real estate holdings. The acreage estimates were computed by summing the estimated value of farmland holdings for all banks in each State and dividing the sum by the ERS estimates of the State-level per-acre farmland values in February of each year in question.

The acquired farm property held by commercial banks is shown in table 23. Banks holdings of farmland peaked at 924,400 acres valued at $438 million on December 31, 1987.

[1] Section leader, financial economist, and agricultural economist, respectively, Agricultural Finance Section, Agriculture and Rural Economy Division, Economic Research Service.

Table 23--Acquired farm property held by commercial banks 1/

Date	Acres 2/	Value
	Number	Thous. dol.
Jun. 30, 1986 3/	720,800	402,200
Dec. 31, 1986	752,300	414,100
Jun. 30, 1987	917,300	422,200
Dec. 31, 1987	924,400	438,000
Jun. 30, 1988	882,300	428,000

1/ All estimates are for domestically chartered FDIC-insured commercial banks reporting positive loans, deposits, and assets on the date specified. 2/ Acreage estimates computed by summing estimated farmland holdings over all banks in each State and dividing the sum by the ERS estimate of the State-level per acre farmland values in February of the year in question. 3/ The June 30, 1986 data include direct real estate investments.

Sources: Computed from the Report of Income and Report of Condition Files, Board of Governors of the Federal Reserve System and farmland value data published in Agricultural Resources: Agricultural Land Values and Markets: Situation and Outlook Report, AR-10, U.S. Department of Agriculture, Economic Research Service, June 1988.

Table 24--Acquired farm property held by the Farm Credit System 1/

Date	Acres	Value
	Number	Thous. dol.
Dec. 31, 1984	NA	500,563
Dec. 31, 1985	NA	926,993
Dec. 31, 1986	2,732,500 2/	1,093,341
Mar. 31, 1987	2,770,000	1,108,342
Jun. 30, 1987	2,429,900	1,032,882
Sep. 30, 1987	2,351,400	979,268
Dec. 31, 1987	2,265,000	872,547
Mar. 31, 1988	2,001,133	831,197
Jun. 30, 1988	1,438,405	706,115
Sep. 30, 1988	1,427,125	701,739

NA= Not available. 1/ Data include acquired property held by the Federal Land Banks (FLB's)/Federal Land Bank Associations (FLBA's) and the Federal Intermediate Credit Banks (FICB's)/Production Credit Associations (PCA's) but exclude the small amount of acquired property held by the Banks for Cooperatives (BC's). The BC's do not make loans to individual farmers and thus are excluded. 2/ Acres estimated by dividing the value of acquired property held on December 31, 1986 by the March 31, 1987 per acre value of FCS acquired property holdings.

Source: Farm Credit Corporation of America, "National Credit and Review Standards Monitoring Report: Other Property Owned," various issues, and the Farm Credit Administration.

Farm Credit System

The acquired farm property held by the FCS is shown in table 24. These data were collected by the Farm Credit Corporation of America. The farms are valued at current market prices. FCS holdings of farmland peaked at 2.77 million acres worth $1.1 billion on March 31, 1987, and have declined steadily.

Farmers Home Administration

FmHA's acquired farm property holdings by FmHA are shown in table 25. The acquired farms are appraised by the FmHA county supervisor, or sometimes an independent appraiser, at current market value at the time they are taken into inventory. The value of acquired farms is adjusted when some new FmHA action is taken regarding them, such as changing their classification from suitable to surplus. In such instances, the farms could be reappraised. The FmHA acquired farm property data are published monthly in the agency's Farmer Inventory Property report. FmHA holdings of acquired farmland peaked at 1,578,000 acres valued at $848.7 million on March 31, 1987.

Life Insurance Companies

Data for life insurance company holdings of acquired farm property are available semiannually beginning with December 31, 1986. The data were derived from information supplied by life insurance companies who lend to agriculture. This analysis also was buttressed by data and information from the Land Stewardship Project and Center for Urban and Rural Affairs regarding their research on life insurance company farm lending and farm foreclosure (Senf).

The current life insurance company practice is to mark acquired properties to market values on their books at the time of acquisition and to revalue these properties annually, or more often in some cases. In a period of declining farmland values, such as the post 1981-82 period, the annual revaluations would cause the book value to be somewhat above the

Table 25--Acquired Farm Property held by the Farmers Home Administration

Date	Suitable farms 1/	Surplus farms 2/	Total acres	Value of inventory	Average value per farm
	---Number---		Thous.	Thous. dols.	Dollars
Sept. 30, 1985	2,478	1,320	1,023	662,211	174,358
Dec. 31, 1985	2,603	1,341	1,085	695,418	176,323
Mar. 31, 1986	2,674	1,381	1,210	707,209	174,404
Jun. 30, 1986	2,917	1,460	1,286	756,239	172,776
Sept. 30, 1986	3,178	1,704	1,426	838,275	171,707
Dec. 31, 1986	3,225	1,773	1,467	831,239	166,314
Mar. 31, 1987	3,339	1,937	1,578	848,715	160,863
Jun. 30, 1987	3,256	1,939	1,576	777,402	149,644
Sept. 30, 1987	3,196	2,168	1,656	789,726	147,227
Dec. 31, 1987	2,743	2,136	1,543	656,582 3/	134,573
Mar. 31, 1988	2,510	2,125	1,517	630,996	136,137
Jun. 30, 1988	2,426	2,099	1,488	628,591	135,618
Sept. 30, 1988	2,517	2,129	1,538	629,332	135,457

1/ Farms which are suitable for FmHA financing. These farms must be made available to family-sized operators for three years before being reclassified surplus and then sold to others. 2/ Farms which can be sold to the highest bidder. 3/ Decrease from previous period may reflect a change in reporting procedures that begin in fiscal 1988.

Source: U. S. Department of Agriculture, Farmers Home Administration, Report on Farmer Program Inventory Property, various issues.

market value for the acquired properties because of the lag between the reappraisals and the actual price movements of the land market.

Total Farmland Holdings

Total holdings of acquired farm property by the four institutional lenders groups are shown semiannually beginning December 31, 1986, in table 26. Holdings in terms of acres peaked on December 31, 1987, at 9 million acres and in terms of value at $3.8 billion on June 30, 1987. The life insurance companies have become relatively more important as holders of acquired property while the FCS holdings have become less important.

On January 1, 1937, during the Great Depression, the leading lending agencies held about 28 million acres of farmland compared with the 9 million acre peak at the end of 1987 (USDA). It should be noted that many major differences exist between the conditions of the 1930's and 1980's. The acquisitions in the 1980's occurred rapidly. In contrast, the 1930's saw acquisitions spread over more years with the problems building upon the economic stress experienced by the farm sector beginning in the 1920's.

Importance in the Farmland Market

Are lender holdings large enough to depress land prices? To answer this question, acquired farmland is compared with the total stock of farmland, first in terms of total acres, and then in terms of total value of land buildings. Finally, the inventory of acquired property is compared with estimated annual turnover of farmland in the market.

The peak total acreage of acquired farmland of 9 million acres held on December 31, 1987 was 0.9 percent of the total land in farms of 1,002.6 million acres in 1987. The peak total value of all acquired property of $3.8 billion held on June 30, 1987 was only 0.69 percent of the 1987 total value of land and buildings of $549.8 billion. As low as the stock of acreage and value comparisons are for acquired farmland, it is important to go beyond these basic comparisons to evaluate the sales impact by moving from stock to flow comparisons.

The relationship between the stock of lender-acquired farmland and the annual rate of farmland sales (market volume) is most important. Work was done on this questions in ERS based on total lender-acquired property in inventory during the December 31, 1986 - March 31, 1987 period and rural land transfer rates for the July 1985 - June 1986 period (Stam, et al.). The results showed that the institutional lender total acquired property stock was equal to 24 percent of annual sales in terms of acreage and 19.7 percent in terms of value.

The best evidence suggests that lender holdings of farmland are a factor in the farmland markets on the national level, but they have not been a dominating factor for a number of reasons. For instance, the lenders will not sell all of their holdings in any single year; thus, the ratio of acquired property holdings to expected annual transfers overstates their likely importance at any time. The life insurance companies have, as a group been slow to sell farmland and FmHA has been hampered by the Congress and the courts in its attempts to sell large quantities. Large regional differences have existed, however. In some regions and localities the potential impact of lender holdings of acquired farmland has been important.

Table 26--Acquired farm property held by institutional lenders

Date and lender	Property holdings: Acres	Property holdings: Value	Distribution of holdings: Acres	Distribution of holdings: Value
	Number	Thous. Dol.	--Percent--	
December 31, 1986				
Farm Credit System 1/	2,732,500 2/	1,093,341	37.0	28.9
Commercial banks	752,300	414,100	10.2	11.0
Farmers Home Administration	1,466,449	831,239	19.9	22.0
Life insurance companies	2,424,000	1,442,000	32.9	38.1
Total	7,375,449	3,780,680	100.0	100.0
June 30, 1987				
Farm Credit System 1/	2,429,900	1,032,882	28.8	27.1
Commercial banks	917,300	422,200	10.9	11.0
Farmers Home Administration	1,576,392	777,402	18.7	20.4
Life insurance companies	3,508,000	1,582,000	41.6	41.5
Total	8,431,592	3,814,484	100.0	100.0
December 1987				
Farm Credit System 1/	2,265,000	872,547	25.2	24.3
Commercial banks	924,400	438,000	10.3	12.2
Farmers Home Administration	1,543,316	656,582	17.2	18.3
Life insurance companies	4,249,000	1,619,000	47.3	45.2
Total	8,981,716	3,586,129	100.00	100.00
June 30, 1988				
Farm Credit System 1/	1,438,405	706,115	18.1	21.5
Commercial banks	882,300	428,000	11.1	13.0
Farmers Home Administration	1,487,845	628,591	18.8	19.1
Life Insurance Companies	4,125,000	1,524,000	52.0	46.4
Total	7,933,550	3,286,706	100.0	100.0

1/ Data include acquired property held by the Federal Land Bank (FLB's)/ Federal Land Bank Associations (FLBA's) and the Production Credit Associations (PCA's), but exclude the small amount of acquired property held by the Banks for Cooperatives (BC's). The BC's do not make loans to individual farmers and thus are excluded. 2/ Acres estimated by dividing the value of acquired property held on December 31, 1986 by the March 31, 1987 per acre value of FCS acquired property holdings.

Sources: Farm Credit Corporation of America; Board of Governors of the Federal System; USDA, Economic Research Service; USDA, Farmers Home Administration; and life insurance companies.

Management Issues

Lenders came under growing scrutiny of rural advocacy groups in the 1980's regarding their management policies. Their policies on the sale of acquired farmland have generated considerable controversy. Controversy flared especially when a large tract was sold to an "outsider" or "corporate interest," or when the former was evicted without a chance to repurchase the land. The FmHA and FCS have had the most difficulty in this regard. Critics have maintained that the large amount of the acquired property in lender's hands raises serious questions about who controls the Nation's farmland. Because of the problems with sales, many lenders found themselves in the farming business. Some of the acquired property has been placed in the USDA's conservation reserve. Some farms are leased back to the former owners. Many lenders hired professional farm managers to get the highest return possible. Others, notably the life insurance companies, developed their own land-management units, indicating a longer term commitment to maintaining their stake in the farm sector.

The FCS has tried to sell land inventory as soon as possible without unduly affecting local land values. Being a single-sector lender to a sector under financial stress, the FCS had little choice because it needed the cash flow to help solve its own financial problems. Recently, the strengthening farmland market has allowed the FCS to sell repossessed farmland at a profit. The FCS realized a $46 million profit through the first 9 months of 1988 selling its farmland.

Acquired property management and sales policies of the FCS and FmHA have largely been shaped by the Agricultural Credit Act of 1987. Congress requires that FCS institutions and FmHA give the former owner the right to repurchase or lease property lost through foreclosure. FCS institutions must allow repurchase of property at its fair market value and give the former owner the right to match lease or purchase offers made by others before it can be sold. FmHA now provides the former owner with leaseback rights and buyback rights at the Government's net recovery value (market value less acquisition and disposal costs). Further rules assist FmHA borrowers and their families in retaining their homestead and a surrounding parcel of land.

FmHA has further restrictions on the sale of inventoried property. These restrictions often keep acquired property in inventory for years before it is sold. For example, only farms classified as unsuitable for a family-sized FmHA-eligible borrower (surplus farms) can be sold immediately. Farms classified as suitable are supposed to remain available for purchase by family-sized operators for three years before being reclassified as surplus and then sold to others.

Commercial bank holdings tend to be scattered among thousands of banks that are often limited by law as to how long they can hold acquired farmland. But the restrictions vary by type of bank. National banks can hold real estate for up to 10 years. State-chartered banks are subject to State-imposed limits, that are sometimes as short as a year. Overall, most commercial banks try to sell their holdings relatively quickly.

Life insurance companies, as a group, have taken more of a "wait and see" stance regarding the sale of acquired farmland. Although some companies are aggressively selling their inventory, many are content to hold the properties as investments, watchful of future increases in farmland values. While in inventory, the land is usually leased for cash. Most of the major life insurance companies have the internal resources necessary to manage their acquired property. Some farm management firms have been purchased by life insurance companies in recent years.

Prospects

The evidence indicates that lender holdings are being reduced. Farmland markets became stronger beginning in 1987 and stabilizing or increasing values help lenders sell their acquired properties. Qualified optimism in the land markets stems from expectations of relatively high net cash farm income and manageable interest rates, which will allow more buyers to finance land purchases. Downward pressure on farmland values could occur if price supports or other Government programs are reduced because much of the current strength of farm net cash income is based on Government payments.

Future levels of lender-held farmland will also be influenced by the Agricultural Credit Act of 1987. Both the number of farms going into inventory and the management of inventory are affected. The act has the greatest influence on FmHA and FCS land policies, but it influences all lenders' acquired property levels.

The act authorized a 3-year demonstration program for the purchase of FCS-acquired farmland by farmers at interest rates subsidized through FmHA. Under the program, the FCS could be required to make available up to $250 million of its farm inventory for purchase by FmHA eligible family-sized farmers at fair market value. FmHA would guarantee loans made by other lenders at subsidized rates. Funding and regulations of the program will ultimately determine how influential the program is on FCS inventory levels.

The act also authorized Federal matching grants to qualifying State farm loan mediation programs. These grants could encourage more mediation programs and hence reduce foreclosure rates--and reduce the number of farms going into inventory. In addition, the act requires mandatory restructuring of certain FCS and FmHA loans that will likely reduce the foreclosure rates of these lenders.

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THE FARMER MAC SECONDARY MARKET: PROSPECTS FOR 1989

by
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Abstract: The Agricultural Credit Act of 1987 (P.L. 100-233), enacted in January 1988, established the Federal Agricultural Mortgage Corporation (Farmer Mac) and charged it with forming a secondary market for high-quality farm mortgages modeled after the secondary market for home mortgages. In a secondary market, lenders sell mortgages to poolers who, in turn, sell securities backed by those mortgages to investors. The success of Farmer Mac will depend on the underwriting standards adopted and active Farm Credit System (FCS) participation. Development of underwriting standards and other administrative requirements are likely to delay market operations until late 1989.

Keywords: Secondary markets, farm credit, Agricultural Credit Act of 1987, agricultural policy, Farmer Mac.

The Agricultural Credit Act of 1987 (P.L. 100-233), enacted in January 1988, established Farmer Mac and charged it with forming a secondary market for high-quality farm mortgages modeled after the secondary market for home mortgages. In a secondary market, lenders sell loans to poolers who then sell securities backed by those loans to investors. If Farmer Mac adheres to its legislative timetable from this point forward, the first farm mortgage pools could be guaranteed in the fall 1989.

Market Structure

The 1987 Act establishes the responsibilities of originators, poolers, and investors in the Farmer Mac secondary market. A pool trustee is necessary to the proper functioning of the market, but the legislation is silent on the trustee's role. Farm mortgage borrowers do not participate directly in the secondary market. The relationships among these participants define the secondary market (figure 14).

An originator is a lender, such as a commercial bank, life insurance company, Farm Credit System (FCS) institution, or other financial institution, that makes farm mortgage loans. Originators may sell eligible loans to poolers and earn origination and servicing fees.

A pooler is an investment banker, or other underwriter, who assembles mortgages into a pool and issues securities collateralized by those mortgages. Originators and/or the pooler must establish a reserve worth 10 percent of the principal value of the pool's mortgages. Poolers must be approved by Farmer Mac, which determines pooler certification standards and enforces underwriting and servicing standards.

Farmer Mac is a Federally chartered corporation under the aegis of the FCS. Farmer Mac will guarantee investors timely payments of interest and principal of secondary market paper, and guarantee pools against default after the 10-percent reserve is exhausted.

Potential Effects on the Farm Mortgage Market

Farm mortgage sales on the secondary market will provide lenders with the liquidity to make additional investments. Because lenders can use this liquidity for any purpose, it is unclear how much new credit farmers will receive. The secondary market will likely improve private lender access to national capital markets and make them more competitive with the FCS.

Increased lender liquidity will likely affect borrowers differently as conditions vary in the farm mortgage market. When the demand for farm mortgage credit exceeds the supply (that is, private lenders are "all loaned up" or face rising unit costs), the secondary market loan sales may expand the credit available to borrowers at existing interest rates. When participating lenders already have adequate funds to make new loans, the secondary market loan sales may make the farm mortgage market more price competitive and lower interest rates by cutting into lenders' profit margins.

Other effects may result from the imposition of higher underwriting standards for loans being sold into the secondary market than have usually been required for farm mortgage loans. Borrowers conforming to the new standards will benefit from improved access to credit or lower interest rates, as discussed above. Loan application forms, credit terms, and the cost of loans to conforming borrowers are likely to become more standardized across lenders and areas of the country with the establishment of the market (Kaufman).

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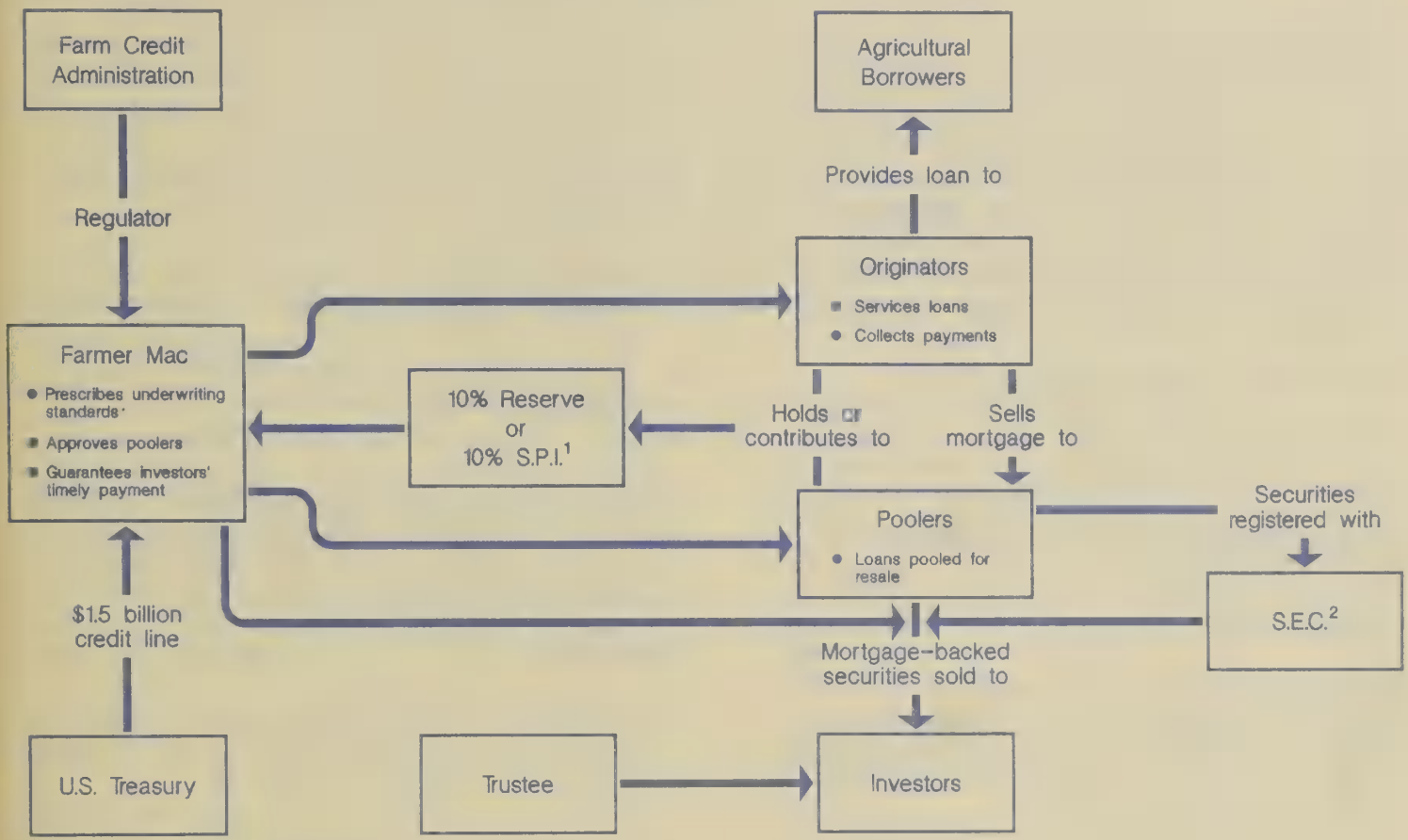
Figure 14

Farmer Mac Secondary Market for Farm Mortgages



1/ SPI = Subordinated Participation Interest.
2/ SEC = Securities and Exchange Commision.

Prospects for a Commercially-Viable Secondary Market

Farmer Mac's commercial viability depends on the size of its market. Two points are critical in the new market's evolution. The first point appears where the unit cost of issuing a security of fixed denomination declines to a minimum as the size of the pool increases. Past research and common practice suggest that $100-$300 million of mortgage assets are required to minimize unit costs (Silber). The second point will come as the total number of securities outstanding rises to the point where securities are actively traded. Industry rules of thumb suggest that at least $2 billion of securities outstanding with annual sales of roughly $500 million are required to support active trading.

Several factors will significantly affect the number of mortgage loans offered for sale in the secondary market. First, each pool may be treated as a separate market because of the unique characteristics of individual loans. Second, seasoned debt may not meet mortgage documentation standards. Therefore, at least initially, only new originations are likely to be pooled. Third, underwriting standards may eliminate a substantial proportion of new debt from inclusion in mortgage pools.

Congress placed limits on the total principal of private debt that Farmer Mac can guarantee during 1988, 1989, and 1990. No debt was pooled in 1988. The limit for 1989 is projected at $4.2 billion and for 1990 at $9.8 billion (Hiemstra, Koenig, and Freshwater).

Considering the legal and administrative costs involved in issuing securities, an investment banker has estimated that a public pool needs $100 million in assets to be commercially viable. Assuming a pool size closer to that required to obtain minimum unit costs in public agency issues ($300 million), Farmer Mac could issue only about 14 pools of private debt in 1989 (Silber). Consequently, if Farmer Mac guarantees all the private debt legally permitted in 1989, between 14 and 42 pools can be issued.

Barring a rapid increase in originations, this legislative limit on the principal that Farmer Mac can guarantee will likely not pose a binding constraint on the pooling of private farm mortgage debt. Private originations by commercial banks and life insurance companies in 1986 were roughly $2.4 billion (Hiemstra, Koenig, and Freshwater). FCS originations provide the largest potential source of mortgages to be pooled and FCS originations are not subject to the congressional debt ceiling imposed on Farmer Mac. In fiscal 1987,

the Federal land banks originated $2.6 billion of new debt (Hiemstra, Koenig, and Freshwater).

Adding private and FCS originations, the market in eligible originations sums to an annual maximum of $5 billion. This assumes that originations remain at their 1987 level, that all originations meet the underwriting standards, and that all are sold on the secondary market. Whether or not this level of secondary market activity is reached depends heavily on participation of the FCS, incentives for other lenders to participate, and the strictness of the underwriting standards adopted. It seems unlikely that more than half of all new farm mortgage debt will be sold in the secondary market during 1989 ($1.5 to $2.5 billion in originations) which will permit formation of roughly eight pools per year.

Comparing this latter figure with the limits established by Congress estimated above, it is clear that market limitations are more likely than legislative limitations to restrict growth of the secondary market unless restructuring and sale of seasoned debt is permitted.

Progress to Date

Table 27 outlines the legislative timetable for establishment of the Farmer Mac secondary market. Delays in making appointments, in issuing standards, and in attracting participation are to be expected. It will likely be the fall of 1989 before securities can be issued.

Table 27--Time horizon for Farmer Mac's institutional development

Months	Action required by 1987 Act	Actual or expected completion date
0	Legislative enactment	1-88
3	Presidential appointment of the interim board	6-88
9	Presidential appointment of the permanent board and its chair	9-88
	Issuance of Farmer Mac stock to potential originators and poolers	12-88
	Election of other representatives serving on the permanent board	2-89 2/
12	Permanent board issues underwriting and pooler certification standards	6-89 2/
16	Congress completes its review of the proposed underwriting and certification standards 1/	10-89 2/

1/ Sixteen months from January 6, 1988 is May 6, 1989.
2/ Anticipated date of completion.

Source: de la Garza.

To date, a number of items on the proposed outline of events have already taken place. Farmer Mac's interim board of directors was appointed in the summer of 1988. First Boston Corporation was selected to issue Farmer Mac stock, a prospectus was distributed in the fall, and the stock offering was closed in December. Roughly $13 million in class A stock was sold to some 1,500 private lenders, mostly small rural banks, and $10 million in class B stock was sold to institutions in the FCS. Some 30 lenders made the $100,000 investment in stock required to qualify as poolers.

An election of the permanent board of directors was held for January 1989 and the elected board met in February to select a chief executive officer (CEO). In coming months, the CEO will need to hire a staff, contract for office space, and prepare administrative guidelines. These guidelines include underwriting standards for loans and certification standards for poolers which must be prepared within four months for congressional review. Ideally, Congress will receive these materials by the end of June and will complete its review within the following three months. The first securities could then conceivably be issued the beginning of October.

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RECENT DEVELOPMENTS IN FEDERAL INCOME TAXATION FOR FARMERS

by
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Abstract: The Technical and Miscellaneous Revenue Act of 1988 contained a number of important provisions for farm taxpayers. The "heifer tax" which required livestock producers to capitalize rather than currently deduct the cost of raising replacement livestock was repealed. The Act also restored the ability of farmers to make tax-free purchases of diesel fuel and clarified the tax treatment of drought and debt-restructuring relief. Overall, the Act should provide a net benefit to farm taxpayers.

Keywords: Heifer tax, diesel fuel tax, depreciation, development costs, disaster payments.

The revision of Federal income tax laws continued in 1988, with the enactment of the Technical & Miscellaneous Revenue Act. For farmers, the Act repealed or revised various tax provisions enacted in the Tax Reform Act of 1986 the and Revenue Act of 1987. The 1988 Act also clarified the tax treatment of drought and debt-restructuring relief, and made a number of changes concerning the recovery periods and depreciation rates for farm business property.

"Heifer Tax" Repealed

One of the most controversial provisions of the Tax Reform Act of 1986 affected the deductability of costs associated with the development of certain capital assets, such as raising dairy and breeding livestock to maturity and the caring for new orchards and vineyards until they reach bearing age. Previously, farmers claimed immediate tax deductions for such expenditures. The 1986 Act required farmers to capitalze these preproductive period expenditures for assets with a development period of more than 2 years. This imposed a significant recordkeeping requirement on farming operations with long-term development costs. Because of the continuous nature of their development process, livestock operations were particularly hard hit. The 1988 Act restores the ability of farmers to immediately deduct the costs of raising breeding and dairy livestock to maturity and thus eliminates this burdensome requirement for livestock operations. This change applies to costs incurred after December 31, 1988.

Other Capitalization Rules Clarified

The capitalization rules of the Tax Reform Act of 1986 continue to apply to other development costs. Under these rules, farmers (except for producers of pistachio nuts) that are not required to use the accrual method of accounting can elect to continue to currently deduct development costs and depreciate farm assets under a less favorable alternative depreciation system. The 1988 Act extends this election to costs associated with the planting, cultivation, maintenance, or development of pistachio trees.

An exception to the uniform capitalization rules is also available to those farmers that use an annual accrual method of accounting. The 1988 Act makes it clear that this exception applies only to producers of sugar cane and not to other farmers that use an annual accrual method of accounting. Thus, other farmers that use an annual accrual method of accounting will be required to capitalize development costs or make the alternative election.

The 1988 Act expands an additional exception to the uniform capitalization rules. Under this exception, costs incurred in replanting edible crops following loss or damage due to freezing temperatures, disease, drought, pests, or other casualty may be deducted. This exception applies not only to the farmer who incurred the loss or damage but to an outside investor as well. Prior to the 1988 Act, the exception was available to an outside investor only if the farmer who incurred the loss or damage retained an equity interest of more than 50 percent in the property and the investor claiming the deduction materially participated in the planting or maintenance of the property during the four-taxable year period beginning with the year of the loss or damage. The 1988 Act eliminates the 4-year requirement. Therefore, an investor who materially participates in the replanting of an orchard or vineyard is eligible to deduct development costs regardless of the date when the damage occurred.

Tax-Free Purchases of Diesel Fuel

Diesel fuel used in farming operations is exempt from the Federal excise tax. Prior to the Omnibus Budget Reconciliation Act of 1987, farmers could purchase diesel fuel

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delivered to a farm storage tank without paying the tax. Following the 1987 Act, farmers were required to pay the tax and claim it as a credit against their income tax liability or file for a refund. As a result, farmers were faced with a 20-to-25 percent increase in the cost of diesel fuel. Although this additional cost eventually could be recovered as a refund or credit against their income tax liability, in most cases the tax may not have been recovered for at least a year.

The 1988 Act restores the ability of farmers to make tax-free purchases of diesel fuel and thus eliminates the additional expense and administrative burden associated with the payment of the tax and the filing for a refund.

The Act contains registration and reporting requirements to ensure that tax collections are not adversely affected by this change. The change applies to purchases of fuel after December 31, 1988, and provides for a one-time refund with interest for taxes paid on fuel purchased by farmers between March 31, 1988 and January 1, 1989.

Drought Provisions

Livestock Sales

Drought-induced sales of livestock held for breeding or dairy purposes in excess of the number a farmer would sell under normal circumstances are treated as an involuntary conversion. This entitles the farmer to replace them with similar livestock within a 2-year period and not recognize any gain until the replacement livestock are sold. A cash method farmer may also elect to defer income from livestock other than those held for draft, breeding, dairy, or sporting purposes sold because of drought until the next taxable year. Under the 1988 Act, farmers forced to sell livestock due to drought conditions are also permitted to defer the recognition of income from the sale of draft, breeding, dairy, or sporting livestock until the year following the year of sale. This would allow those farmers who sell but do not plan to replace such livestock to avoid the bunching of income in 1988 that might otherwise occur as a result of forced sales due to drought conditions.

Disaster Payments

Farmers who receive crop insurance proceeds or disaster payments under the Agricultural Act of 1949 may include them as income in the year following the damage if they can demonstrate that the income would normally have been reported in a later tax year. Without this option, farmers who normally defer the sale of their crop until the following tax year could be forced to recognize income from two crop years in one tax year. The 1988 Act makes it clear that payments received under Title II of the Disaster Assistance Act of 1988 are treated in the same manner as payments received under the Agricultural Act of 1949 and are therefore eligible for the one-year deferral available for crop insurance proceeds. This change should ensure that the disruptions in production and marketing patterns caused by the drought do not cause similar distortions in farm income for tax purposes.

FICA Tax Exemption for Certain Agricultural Workers

The Omnibus Budget Reconciliation Act of 1987 subjected cash wages paid to an agricultural laborer to the FICA tax if the employee received $150 in cash wages in any calendar year or if the employer paid more than $2,500 to all agricultural laborers during the year. Under the 1988 Act, an employee who is paid less than $150 is exempted from the FICA tax if the employee satisfies certain conditions. These conditions require that the employee: (1) is employed in agriculture, (2) is a hand-harvest laborer, (3) is paid on a piece-rate basis, (4) is employed in an operation customarily paid on a piece-rate basis, (5) commutes daily from a permanent residence to the farm and, (6) has been employed in agriculture less than 13 weeks during the previous calendar year.

Depreciation Rates and Recovery Periods

To offset a portion of the revenue loss associated with the repeal of the heifer tax and various other farm tax provisions, the 1988 Act altered the recovery period and the rate of depreciation for various types of farm depreciable property (table 28). These changes included the lengthening of the recovery period for single-purpose agricultural and horticultural structures from 7 to 10 years, requiring that farm property be depreciated at a 150-percent declining balance method rather than the 200-percent rate available for nonfarm depreciable property, and reducing the recovery period for orchards and vineyards from 15 to 10 years with a straight-line rate of depreciation. These changes reduce the incentive to invest in depreciable farm property, particularly single-purpose agricultural structures.

Table 28--Tax treatment of farm capital under old and new law

Asset type	Tax life		Depreciation rates 1/	
	Old law	New law	Old law	New law
	-- Years --		-- Percent --	
Motor vechicles 2/	5	5	200	150
Farm machinery 3/	7	7	200	150
Crop storage structures 4/	7	7	200	150
Unitary livestock structures 5/	7	10	200	150
Orchard & vineyards	15	10	150	SL 6/
Multipurpose structures 7/	20	20	150	150

1/ Declining-balance method at rate specified. 2/ Autos and trucks. 3/ Tractors, combines, and all other farm machinery except motor vehicles. 4/ Silos, corn cribs, grain storage bins, and all other structures used principally for the bulk storage of crops. 5/ Milking parlors, poultry houses, unitary hog-raising facilities, and other structures used for the housing, raising, and feeding of a single type of livestock. 6/ Straight-line depreciation method. 7/ Barns, machine sheds, garages, warehouses, structures used for the housing, raising, or feeding of more than one type of livestock, and all structures not classified elsewhere.

Discharge of Farm Indebtedness

The farm financial crisis created a number of Federal income tax concerns for farmers. One such concern involved the recognition of income associated with the discharge of farm debt. The Tax Reform Act of 1986 created a new exclusion from income for the discharge of qualified farm indebtedness. However, the scope of the exclusion remained unclear as a result of ambiguities in the legislation. Under the exclusion, the discharge of "qualified farm indebtedness" by a "qualified person" can be excluded from income. The 1988 Act clarifies the scope of the exclusion and defines a "qualified person" and "qualified farm indebtedness". Under the Act, "qualified farm indebtedness" is indebtedness incurred in connection with a farm operation by an individual whose average aggregate gross receipts from farming over the last three tax years proceeding the year of discharge are 50 percent or more of average total gross receipts during this period. The definition of a "qualified person" is expanded to include a Federal, State or local government or agency thereof. Finally, the Act makes it clear that relief under the exception is not unlimited but is available only to the extent of tax attributes and basis in qualified property. These changes clarify the tax consequences associated with the restructuring of farm debt.

Conclusions

The Technical and Miscellaneous Revenue Act of 1988 made a number of changes to tax provisions of importance to farmers. The repeal of the heifer tax and restoration of the ability to make tax-free purchases of diesel fuel eliminated a significant administrative and financial burden. In addition, the changes relating to drought relief will provide farmers with a number of options to minimize any distortions in farm taxable income caused by the drought. Although these benefits will be partially offset by the lower depreciation deductions that will occur over the next few years as a result of the changes to recovery periods and depreciation rates, overall, the Act should have a positive effect on after-tax farm income, particularly for livestock producers.

Appendix table 1--Total farm debt excluding households, December 31

Year	Debt owed to reporting institutions: Farm Credit System	Commercial banks	Farmers Home Adm.	Life insurance companies	Total	Individuals and others 1/	Total debt
	Million dollars						
1975	25,222	24,672	4,604	6,198	60,696	24,316	85,013
1976	29,008	28,077	4,963	6,828	68,876	27,191	96,065
1977	32,994	31,289	6,377	8,150	78,810	32,047	110,857
1978	37,566	34,435	8,832	9,698	90,531	36,871	127,402
1979	45,376	37,125	14,442	11,278	108,221	43,329	151,551
1980	52,958	37,746	17,460	11,991	120,155	46,624	166,779
1981	61,523	38,788	20,792	12,136	133,239	49,037	182,275
1982	64,524	41,948	21,338	11,898	139,708	49,793	189,501
1983	64,418	45,569	21,573	11,834	143,394	49,301	192,694
1984	63,407	46,932	22,946	11,592	144,877	45,899	190,775
1985	55,206	44,181	24,254	11,035	134,676	40,537	175,215
1986	45,354	41,355	23,907	10,199	120,815	34,484	155,299
1987	39,138	40,896	23,372	9,231	112,637	30,048	142,685
1988P	36,459	42,582	22,809	8,862	110,712	28,716	139,428
	Percent change in year						
1975	16.2	9.4	20.6	6.9	12.7	10.6	12.1
1976	15.0	13.8	7.8	10.2	13.5	11.8	13.0
1977	13.7	11.4	28.5	19.4	14.4	17.9	15.4
1978	13.9	10.1	38.5	19.0	14.9	15.1	14.9
1979	20.8	7.8	63.5	16.3	19.5	17.5	19.0
1980	16.7	1.7	20.9	6.3	11.0	7.6	10.0
1981	16.2	2.8	19.1	1.2	10.9	5.2	9.3
1982	4.9	8.1	2.6	-2.0	4.9	1.5	4.0
1983	-0.2	8.6	1.1	-0.5	2.6	-1.0	1.7
1984	-1.6	3.0	6.4	-2.0	1.0	-6.9	-1.0
1985	-12.9	-5.9	5.7	-4.8	-7.0	-11.7	-8.2
1986	-17.8	-6.4	-1.4	-7.6	-10.3	-14.9	-11.4
1987	-13.7	-1.1	-2.2	-9.5	-6.8	-12.9	-8.1
1988p	-6.8	4.1	-2.4	-4.0	-1.7	-4.4	-2.3
	Percentage distribution of debt						
1975	29.7	29.0	5.4	7.3	71.4	28.6	100.0
1976	30.2	29.2	5.2	7.1	71.7	28.3	100.0
1977	29.8	28.2	5.8	7.4	71.1	28.9	100.0
1978	29.5	27.0	6.9	7.6	71.1	28.9	100.0
1979	29.9	24.5	9.5	7.4	71.4	28.6	100.0
1980	31.8	22.6	10.5	7.2	72.0	28.0	100.0
1981	33.8	21.3	11.4	6.7	73.1	26.9	100.0
1982	34.0	22.1	11.3	6.3	73.7	26.3	100.0
1983	33.4	23.6	11.2	6.1	74.4	25.6	100.0
1984	33.2	24.6	12.0	6.1	75.9	24.1	100.0
1985	31.5	25.2	13.8	6.3	76.9	23.1	100.0
1986	29.2	26.6	15.4	6.6	77.8	22.2	100.0
1987	27.4	28.7	16.4	6.5	78.9	21.1	100.0
1988p	26.1	30.5	16.4	6.4	79.4	20.6	100.0

P=Preliminary. 1/ Includes individuals and others (land for contract, merchants and dealers credit, etc.) and CCC storage and drying facilities loans.

Appendix table 2--Real estate farm debt excluding households, December 31

Year	Debt owed to reporting institutions					Individuals and others	CCC storage and drying facilities	Total
	Federal Land Banks	Life insurance companies	Commercial banks	Farmers Home Administration	Total			
	Million dollars							
1975	14,533	6,198	5,621	3,044	29,396	15,764	170	45,331
1976	16,881	6,828	6,075	3,311	33,095	17,258	144	50,497
1977	19,640	8,150	6,994	3,613	38,397	19,556	492	58,445
1978	22,686	9,698	7,717	3,746	43,847	21,712	1,148	66,707
1979	27,322	11,278	7,798	6,254	52,652	25,660	1,391	79,704
1980	33,208	11,991	7,760	7,431	60,390	27,801	1,456	89,647
1981	40,254	12,136	7,573	8,086	68,049	29,291	1,342	98,682
1982	43,966	11,898	7,626	8,361	71,851	29,527	1,127	102,505
1983	45,026	11,834	8,494	8,718	74,072	29,847	888	104,806
1984	45,321	11,592	9,313	9,206	75,432	27,636	623	103,691
1985	41,204	11,035	10,443	9,540	72,222	25,160	307	97,690
1986	34,773	10,199	11,677	9,482	66,131	22,218	123	88,472
1987	29,867	9,231	13,307	9,249	61,654	19,086	46	80,786
1988p	27,620	8,862	14,177	9,081	59,740	16,941	15	76,696
	Percent change in year							
1975	19.3	6.9	5.8	5.0	12.2	9.8	-21.7	11.2
1976	16.2	10.2	8.1	8.8	12.6	9.5	-15.3	11.4
1977	16.3	19.4	15.1	9.1	16.0	13.3	241.7	15.7
1978	15.5	19.0	10.3	3.7	14.2	11.0	133.3	14.1
1979	20.4	16.3	1.0	67.0	20.1	18.2	21.2	19.5
1980	21.5	6.3	-0.5	18.8	14.7	8.3	4.7	12.5
1981	21.2	1.2	-2.4	8.8	12.7	5.4	-7.8	10.1
1982	9.2	-2.0	0.7	3.4	5.6	0.8	-16.0	3.9
1983	2.4	-0.5	11.4	4.3	3.1	1.1	-21.2	2.2
1984	0.7	-2.0	9.6	5.6	1.8	-7.4	-29.8	-1.1
1985	-9.1	-4.8	12.1	3.6	-4.3	-9.0	-50.7	-5.8
1986	-15.6	-7.6	11.8	-0.6	-8.4	-11.7	-59.9	-9.4
1987	-14.1	-9.5	14.0	-2.5	-6.8	-14.1	-62.6	-8.7
1988p	-7.5	-4.0	6.5	-1.8	-3.1	-11.2	-67.4	-5.1
	Percentage distribution of debt							
1975	32.1	13.7	12.4	6.7	64.8	34.8	0.4	100.0
1976	33.4	13.5	12.0	6.6	65.5	34.2	0.3	100.0
1977	33.6	13.9	12.0	6.2	65.7	33.5	0.8	100.0
1978	34.0	14.5	11.6	5.6	65.7	32.5	1.7	100.0
1979	34.3	14.1	9.8	7.8	66.1	32.2	1.7	100.0
1980	37.0	13.4	8.7	8.3	67.4	31.0	1.6	100.0
1981	40.8	12.3	7.7	8.2	69.0	29.7	1.4	100.0
1982	42.9	11.6	7.4	8.2	70.1	28.8	1.1	100.0
1983	43.0	11.3	8.1	8.3	70.7	28.5	0.8	100.0
1984	43.7	11.2	9.0	8.9	72.7	26.7	0.6	100.0
1985	42.2	11.3	10.7	9.8	73.9	25.8	0.3	100.0
1986	39.3	11.5	13.2	10.7	74.7	25.1	0.1	100.0
1987	37.0	11.4	16.5	11.4	76.3	23.6	0.1	100.0
1988p	36.0	11.6	18.5	11.8	77.9	22.1	0.0	100.0

P = Preliminary.

Appendix table 3--Nonreal estate farm debt excluding households, December 31

Year	Debt owed to reporting institutions					Individuals and others	Total	CCC crop loans
	Production Credit Associations	Federal Intermediate Credit Banks	Commercial banks	Farmers Home Administration	Total			
	Million dollars							
1975	10,339	350	19,051	1,560	31,300	8,382	39,682	232
1976	11,759	368	22,002	1,652	35,781	9,789	45,570	936
1977	12,978	376	24,295	2,764	40,413	11,999	52,412	4,146
1978	14,369	511	26,718	5,086	46,684	14,011	60,695	4,646
1979	17,388	666	29,327	8,188	55,569	16,278	71,848	3,714
1980	18,939	811	29,986	10,029	59,765	17,367	77,132	3,525
1981	20,355	914	31,215	12,706	65,190	18,404	83,593	6,666
1982	19,686	872	34,322	12,977	67,857	19,139	86,996	14,525
1983	18,542	850	37,075	12,855	69,322	18,566	87,888	9,911
1984	17,211	875	37,619	13,740	69,445	17,640	87,084	8,319
1985	13,465	537	33,738	14,714	62,454	15,070	77,525	17,029
1986	10,306	275	29,678	14,425	54,684	12,143	66,827	18,682
1987	9,106	165	27,589	14,123	50,983	10,916	61,900	14,581
1988p	8,764	75	28,405	13,728	50,972	11,760	62,731	10,000
	Percent change in year							
1975	13.0	-6.4	10.5	69.7	13.1	13.3	13.1	-23.7
1976	13.7	5.1	15.5	5.9	14.3	16.8	14.8	303.4
1977	10.4	2.2	10.4	67.3	12.9	22.6	15.0	342.9
1978	10.7	35.9	10.0	84.0	15.5	16.8	15.8	12.1
1979	21.0	30.3	9.8	61.0	19.0	16.2	18.4	-20.1
1980	8.9	21.8	2.2	22.5	7.6	6.7	7.4	-5.1
1981	7.5	12.7	4.1	26.7	9.1	6.0	8.4	89.1
1982	-3.3	-4.6	10.0	2.1	4.1	4.0	4.1	117.9
1983	-5.8	-2.5	8.0	-0.9	2.2	-3.0	1.0	-31.8
1984	-7.2	2.9	1.5	6.9	0.2	-5.0	-0.9	-16.1
1985	-21.8	-38.6	-10.3	7.1	-10.1	-14.6	-11.0	104.7
1986	-23.5	-48.8	-12.0	-2.0	-12.4	-19.4	-13.8	9.7
1987	-11.6	-40.0	-7.0	-2.1	-6.8	-10.1	-7.4	-20.5
1988p	-3.8	-54.5	3.0	-2.8	0.0	7.7	1.3	-32.7
	Percentage distribution of debt							
1975	26.1	0.9	48.0	3.9	78.9	21.1	100.0	
1976	25.8	0.8	48.3	3.6	78.5	21.5	100.0	
1977	24.8	0.7	46.4	5.3	77.1	22.9	100.0	
1978	23.7	0.8	44.0	8.4	76.9	23.1	100.0	
1979	24.2	0.9	40.8	11.4	77.3	22.7	100.0	
1980	24.6	1.1	38.9	13.0	77.5	22.5	100.0	
1981	24.4	1.1	37.3	15.2	78.0	22.0	100.0	
1982	22.6	1.0	39.5	14.9	78.0	22.0	100.0	
1983	21.1	1.0	42.2	14.6	78.9	21.1	100.0	
1984	19.8	1.0	43.2	15.8	79.7	20.3	100.0	
1985	17.4	0.7	43.5	19.0	80.6	19.4	100.0	
1986	15.4	0.4	44.4	21.6	81.8	18.2	100.0	
1987	14.7	0.3	44.6	22.8	82.4	17.6	100.0	
1988p	14.0	0.1	45.3	21.9	81.3	18.7	100.0	

P = Preliminary

Appendix table 4--Selected agricultural interest rates on real estate loans, 1960-88 1/

Year	Prime Rate charged by banks 2/	3-month Treasury bills 2/	Real Estate: Federal Land Banks 3/	Real Estate: Life insur. companies 4/	Real Estate: FmHA 5/	Real Estate: Av. on farm real estate loans 6/
			Percent			
1960	4.82	2.95	6.00	5.00	5.00	5.00
1965	4.54	3.95	5.60	5.50	5.00	5.35
1970	7.91	6.44	8.68	9.31	5.00	5.88
1975	7.86	5.82	8.69	10.03	5.00	6.98
1980	15.27	11.61	10.39	13.21	11.05	8.17
1981	18.87	14.07	11.27	15.42	13.00	8.92
1982	14.86	10.72	12.27	15.51	12.94	9.58
I	16.27	12.90	12.17	16.36	13.25	NA
II	16.50	12.36	12.28	16.21	13.25	NA
III	14.72	9.71	12.35	15.99	13.25	NA
IV	11.96	7.94	12.29	13.46	12.01	NA
1983	10.79	8.62	11.63	12.47	10.79	9.60
I	10.88	8.08	11.90	12.93	10.89	NA
II	10.50	8.42	11.70	12.30	10.75	NA
III	10.80	9.19	11.49	12.08	10.75	NA
IV	11.00	8.79	11.44	12.55	10.75	NA
1984	12.04	9.57	11.76	13.49	10.75	9.48
I	11.07	9.13	11.50	13.04	10.75	NA
II	12.31	9.84	11.62	13.56	10.75	NA
III	12.99	10.34	11.79	13.71	10.75	NA
IV	11.80	8.97	12.14	13.65	10.75	NA
1985	9.93	7.49	12.24	12.60	10.75	9.06
I	10.54	8.18	12.24	12.88	10.75	NA
II	10.20	7.52	12.40	12.73	10.75	NA
III	9.50	7.10	12.40	12.50	10.75	NA
IV	9.50	7.15	12.40	12.34	10.75	NA
1986	8.33	5.97	11.61	11.95	9.13	9.05
I	9.37	6.89	11.90	12.78	10.75	NA
II	8.61	6.13	11.50	12.04	9.25	NA
III	7.85	5.53	11.10	11.80	8.25	NA
IV	7.50	5.34	11.95	11.20	8.25	NA
1987	8.15	5.83	11.10	NA	8.75	8.96
I	7.50	5.53	11.40	10.80	8.25	NA
II	8.05	5.73	10.90	10.60	8.25	NA
III	8.40	6.03	10.75	NA	9.25	NA
IV	8.92	6.11	11.50	NA	9.25	NA
1988	9.31	6.67	10.10	NA	9.46	9.46
I	8.63	5.76	9.88	NA	9.50	NA
II	8.75	6.23	9.82	NA	9.17	NA
III	9.67	6.99	10.06	NA	9.50	NA
IV	10.17	7.69	10.56	NA	9.67	NA

NA= Not available.

1/ For historical data see Agricultural Finance Statistics, USDA, ERS, 1960-83. 2/ Source: ERS Darts Data System. 3/ Source: Farm Credit Administration. 4/ Estimated by ERS from data obtained in a quarterly life insurance survey. 5/ Average for new FmHA loans, rates are weighted by length of time various rates were in effect during the quarter. 6/ Computed from data in Economic Indicators of the Farm Sector, USDA, ERS. Average interest rate on outstanding debt, excludes farm operator household interest and debt.

Appendix table 5--Selected agricultural interest rates on nonreal estate loans, 1960-88 1/

Year	Nonreal Estate						
	Commercial Banks 2/			Production Credit Assns. 3/	FmHA 4/	Ave. nonreal estate 5/	Ave. on total farm debt 5/
	All banks	Large banks	Other banks				
	Percent						
1960	6.80	NA	NA	7.25	5.00	6.12	5.58
1965	6.70	NA	NA	6.58	5.00	5.97	5.65
1970	8.32	NA	NA	9.45	6.88	7.45	6.58
1975	9.03	NA	NA	9.11	8.63	7.83	7.39
1980	15.20	16.20	15.00	12.74	11.00	11.11	9.58
1981	18.50	19.80	18.10	14.46	14.04	12.66	10.69
1982	16.70	16.10	17.00	14.58	13.73	12.61	11.01
I	17.70	18.00	17.50	15.26	14.33	NA	NA
II	17.80	17.90	17.70	14.84	14.25	NA	NA
III	16.70	15.60	16.40	14.42	14.25	NA	NA
IV	14.70	13.30	15.40	13.80	12.09	NA	NA
1983	13.50	12.10	14.10	11.95	10.31	11.51	10.50
I	13.80	12.50	14.10	12.83	10.74	NA	NA
II	13.20	12.00	13.90	11.77	10.25	NA	NA
III	13.60	12.20	14.10	11.37	10.25	NA	NA
IV	13.60	11.80	14.20	11.82	10.25	NA	NA
1984	14.10	13.10	14.40	12.47	10.25	11.25	10.31
I	13.50	12.20	14.10	12.05	10.25	NA	NA
II	14.20	13.30	14.50	12.10	10.25	NA	NA
III	14.80	14.40	14.90	12.61	10.25	NA	NA
IV	14.20	13.40	14.40	13.10	10.25	NA	NA
1985	12.80	11.20	13.40	12.40	10.25	10.13	9.55
I	13.20	11.70	13.80	12.91	10.25	NA	NA
II	13.00	11.50	13.60	12.50	10.25	NA	NA
III	12.30	40.60	12.90	12.16	10.25	NA	NA
IV	12.30	10.60	13.10	12.03	10.25	NA	NA
1986	11.50	9.60	12.10	11.22	8.66	10.18	9.56
I	12.00	10.30	12.80	11.40	10.25	NA	NA
II	11.50	9.70	12.00	11.25	8.71	NA	NA
III	11.40	9.30	12.10	11.25	8.00	NA	NA
IV	10.80	8.90	11.50	11.00	7.67	NA	NA
1987	10.60	9.20	11.30	10.20	8.12	10.67	9.73
I	10.10	8.40	11.20	10.10	7.50	NA	NA
II	10.70	9.40	11.20	10.00	7.50	NA	NA
III	10.40	9.30	11.10	10.00	8.75	NA	NA
IV	11.00	9.60	11.60	10.30	8.75	NA	NA
1988	11.20	10.20	11.60	10.56	9.02	11.74	10.50
I	11.00	9.70	11.60	10.48	9.00	NA	NA
II	10.70	9.70	11.30	10.51	8.67	NA	NA
III	11.50	10.70	11.80	10.43	9.00	NA	NA
IV	11.60	11.10	11.80	10.82	9.42	NA	NA

NA= Not available. 1/ For historical data see Agricultural Finance Statistics, USDA, ERS, 1960-83. 2/ Source: Federal Reserve Board and Agricultural Finance Databook, June 1987, Board of Governors of the Federal Reserve System, Emanual Melichar. 3/ Source: Farm Credit Administration. 4/ Average for new FmHA loans, rates are weighted by length of time various rates were in effect during the quarter. 5/ Computed from data in Economic Indicators of the Farm Sector, 1986, USDA, ERS. Average interest rate on outstanding debt, excludes farm operator household interest and debt.

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